

In [2]:

```
#importing all required libraries
import glob
import os
import xml.etree.ElementTree as ET
!pip install keras-preprocessing
from keras_preprocessing import image
from PIL import Image
from pathlib import Path
import cv2
from matplotlib import pyplot as plt
import matplotlib.image as mpimg
from sklearn.decomposition import PCA
from sklearn.preprocessing import StandardScaler
```

Collecting keras-preprocessing

```
  Downloading Keras_Preprocessing-1.1.2-py2.py3-none-any.whl (42 kB)
           ━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 42.6/42.6 kB 1.5 MB/s eta 0:00:00
```

Requirement already satisfied: numpy>=1.9.1 in /usr/local/lib/python3.10/dist-packages (from keras-preprocessing) (1.25.2)

Requirement already satisfied: six>=1.9.0 in /usr/local/lib/python3.10/dist-packages (from keras-preprocessing) (1.16.0)

Installing collected packages: keras-preprocessing

Successfully installed keras-preprocessing-1.1.2

In [3]:

```
# Mount Google Drive
from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive

In [4]:

```
#input dog images
def dog_images(dog_breed):
    print(dog_breed)
    path = f'/content/drive/MyDrive/MyImages/{dog_breed}/*'
    return glob.glob(path)
cropped = "./content/drive/MyDrive/ResizedImages/"
dog_images_list = []
dog_breeds = {
    0: 'n02089078-black-and-tan_coonhound',
    1: 'n02091831-Saluki',
    2: 'n02092002-Scottish_deerhound',
    3: 'n02095314-wire-haired_fox_terrier'
}
for i in range(4):
    dog_images_list+=dog_images(dog_breeds[i])
```

n02089078-black-and-tan_coonhound

n02091831-Saluki

n02092002-Scottish_deerhound

n02095314-wire-haired_fox_terrier

In [5]:

```
#input annotations
def annotations(dog_breed):
    print(dog_breed)
    path = os.path.join('/content/drive/MyDrive/MyAnnotations', dog_breed, '*')
    return glob.glob(path)

annotations_list = []

for i in range(4):
    annotations_list+=annotations(dog_breeds[i])
```

```
n02089078-black-and-tan_coonhound  
n02091831-Saluki  
n02092002-Scottish_deerhound  
n02095314-wire-haired_fox_terrier
```

In [6]:

```
# Normalize and convert '/' as the path separator for annotations_list  
annotations_list = [os.path.normpath(i).replace(os.sep, '/') for i in annotations_list]  
# Normalize and convert '/' as the path separator for dog_images_list  
dog_images_list = [os.path.normpath(i).replace(os.sep, '/') for i in dog_images_list]
```

In [7]:

```
len(dog_images_list)
```

Out[7]:

```
748
```

In [8]:

```
#image cropping using the code snippets provided  
  
class crop_resize:  
    def __init__(self):  
        pass  
    def get_bounding_boxes(self, annot):  
        xml = annot  
        tree = ET.parse(xml)  
        root = tree.getroot()  
        objects = root.findall('object')  
        bbox = []  
        for o in objects:  
            bndbox = o.find('bndbox')  
            xmin = int(bndbox.find('xmin').text)  
            ymin = int(bndbox.find('ymin').text)  
            xmax = int(bndbox.find('xmax').text)  
            ymax = int(bndbox.find('ymax').text)  
            bbox.append((xmin, ymin, xmax, ymax))  
        return bbox  
  
    def get_image(self, annot):  
        img_path = '/content/drive/MyDrive/MyImages/'  
        file = annot.split('/')  
        img_filename = img_path + file[-2]+'/'+file[-1]+'.jpg'  
        return img_filename  
  
    def image_save(self):  
        for i in range(len(dog_images_list)):  
  
            bbox = self.get_bounding_boxes(annotations_list[i])  
            dog = self.get_image(annotations_list[i])  
            im = Image.open(dog)  
            for j in range(len(bbox)):  
                im2 = im.crop(bbox[j])  
                im2 = im2.resize((128, 128), Image.ANTIALIAS)  
                new_path = dog.replace('/content/drive/MyDrive/MyImages/', '/content/drive/MyDrive/ResizedImages/')  
                new_path = new_path.replace('.jpg', '-' + str(j) + '.jpg')  
                im2.convert('RGB')  
                head, tail = os.path.split(new_path)  
                Path(head).mkdir(parents=True, exist_ok=True)  
                im2.save(new_path)
```

In [9]:

```
c=crop_resize()  
c.image_save()
```

```
<ipython-input-8-ad1ccf8bd86b>:35: DeprecationWarning: ANTIALIAS is deprecated and will b
```

```
e removed in Pillow 10 (2023-07-01). Use LANCZOS or Resampling.LANCZOS instead.  
im2 = im2.resize((128,128), Image.ANTIALIAS)
```

In [10]:

```
len(dog_images_list)
```

Out[10]:

```
748
```

In [11]:

```
#selecting cropped images  
dog_images_cropped=glob.glob('/content/drive/MyDrive/ResizedImages/*/*')
```

In [12]:

```
# Normalize and convert '/' as the path separator for dog_images_cropped  
dog_images_cropped = [os.path.normpath(i).replace(os.sep, '/') for i in dog_images_cropped]
```

In [13]:

```
def images_select(num_imag):  
    def count_of_images(dog_breed,image_list):  
        count=0  
        for i in image_list:  
            if str(i).split('/')[6]== dog_breed:  
                count+=1  
        if count<num_imag:  
            return True  
        else:  
            return False  
  
    images_hist=[]  
    for i,j in dog_breeds.items():  
        for k in dog_images_cropped:  
            print(str(k).split('/')[6],j)  
            if str(k).split('/')[6] ==j:  
                print(str(k).split('/')[6],j)  
                if count_of_images(j,images_hist):  
                    images_hist.append(k)  
    return images_hist
```

In [14]:

```
images=images_select(2)  
len(images)
```

Streaming output truncated to the last 5000 lines.

```
n02091831_7030.jpg n02089078-black-and-tan_coonhound  
n02091831_6114.jpg n02089078-black-and-tan_coonhound  
n02091831_7066.jpg n02089078-black-and-tan_coonhound  
n02091831_6757.jpg n02089078-black-and-tan_coonhound  
n02091831_7244.jpg n02089078-black-and-tan_coonhound  
n02091831_7169.jpg n02089078-black-and-tan_coonhound  
n02091831_6427.jpg n02089078-black-and-tan_coonhound  
n02091831_5712.jpg n02089078-black-and-tan_coonhound  
n02091831_7287.jpg n02089078-black-and-tan_coonhound  
n02091831_5745.jpg n02089078-black-and-tan_coonhound  
n02091831_725.jpg n02089078-black-and-tan_coonhound  
n02091831_5879.jpg n02089078-black-and-tan_coonhound  
n02091831_6406.jpg n02089078-black-and-tan_coonhound  
n02091831_6451.jpg n02089078-black-and-tan_coonhound  
n02091831_5692.jpg n02089078-black-and-tan_coonhound  
n02091831_6139.jpg n02089078-black-and-tan_coonhound  
n02091831_627.jpg n02089078-black-and-tan_coonhound  
n02091831_6582.jpg n02089078-black-and-tan_coonhound  
n02091831_566.jpg n02089078-black-and-tan_coonhound  
n02091831_6308.jpg n02089078-black-and-tan_coonhound
```


n02095314_2904.jpg n02089078-black-and-tan_coonhound
n02095314_289.jpg n02089078-black-and-tan_coonhound
n02095314_2932.jpg n02089078-black-and-tan_coonhound
n02095314_2863.jpg n02089078-black-and-tan_coonhound
n02095314_2564.jpg n02089078-black-and-tan_coonhound
n02095314_3052.jpg n02089078-black-and-tan_coonhound
n02095314_293.jpg n02089078-black-and-tan_coonhound
n02095314_3321.jpg n02089078-black-and-tan_coonhound
n02095314_3316.jpg n02089078-black-and-tan_coonhound
n02095314_367.jpg n02089078-black-and-tan_coonhound
n02095314_448.jpg n02089078-black-and-tan_coonhound
n02095314_3189.jpg n02089078-black-and-tan_coonhound
n02095314_3242.jpg n02089078-black-and-tan_coonhound
n02095314_3185.jpg n02089078-black-and-tan_coonhound
n02095314_3495.jpg n02089078-black-and-tan_coonhound
n02095314_3299.jpg n02089078-black-and-tan_coonhound
n02095314_3472.jpg n02089078-black-and-tan_coonhound
n02095314_3364.jpg n02089078-black-and-tan_coonhound
n02095314_3509.jpg n02089078-black-and-tan_coonhound
n02095314_464.jpg n02089078-black-and-tan_coonhound
n02095314_318.jpg n02089078-black-and-tan_coonhound
n02095314_3295.jpg n02089078-black-and-tan_coonhound
n02095314_401.jpg n02089078-black-and-tan_coonhound
n02095314_3343.jpg n02089078-black-and-tan_coonhound
n02095314_3166.jpg n02089078-black-and-tan_coonhound
n02095314_3246.jpg n02089078-black-and-tan_coonhound
n02095314_3084.jpg n02089078-black-and-tan_coonhound
n02095314_3451.jpg n02089078-black-and-tan_coonhound
n02095314_3240.jpg n02089078-black-and-tan_coonhound
n02095314_3395.jpg n02089078-black-and-tan_coonhound
n02095314_3483.jpg n02089078-black-and-tan_coonhound
n02095314_3054.jpg n02089078-black-and-tan_coonhound
n02095314_3153.jpg n02089078-black-and-tan_coonhound
n02095314_398.jpg n02089078-black-and-tan_coonhound
n02095314_3512.jpg n02089078-black-and-tan_coonhound
n02095314_3372.jpg n02089078-black-and-tan_coonhound
n02095314_3217.jpg n02089078-black-and-tan_coonhound
n02095314_397.jpg n02089078-black-and-tan_coonhound
n02095314_3527.jpg n02089078-black-and-tan_coonhound
n02095314_3227.jpg n02089078-black-and-tan_coonhound
n02095314_3091.jpg n02089078-black-and-tan_coonhound
n02095314_504.jpg n02089078-black-and-tan_coonhound
n02095314_493.jpg n02089078-black-and-tan_coonhound
n02095314_550.jpg n02089078-black-and-tan_coonhound
n02095314_691.jpg n02089078-black-and-tan_coonhound
n02095314_613.jpg n02089078-black-and-tan_coonhound
n02095314_481.jpg n02089078-black-and-tan_coonhound
n02095314_80.jpg n02089078-black-and-tan_coonhound
n02095314_792.jpg n02089078-black-and-tan_coonhound
n02095314_725.jpg n02089078-black-and-tan_coonhound
n02095314_591.jpg n02089078-black-and-tan_coonhound
n02095314_594.jpg n02089078-black-and-tan_coonhound
n02095314_777.jpg n02089078-black-and-tan_coonhound
n02095314_662.jpg n02089078-black-and-tan_coonhound
n02095314_651.jpg n02089078-black-and-tan_coonhound
n02095314_669.jpg n02089078-black-and-tan_coonhound
n02095314_663.jpg n02089078-black-and-tan_coonhound
n02095314_740.jpg n02089078-black-and-tan_coonhound
n02095314_547.jpg n02089078-black-and-tan_coonhound
n02095314_942.jpg n02089078-black-and-tan_coonhound
n02095314_807.jpg n02089078-black-and-tan_coonhound
n02095314_928.jpg n02089078-black-and-tan_coonhound
n02095314_956.jpg n02089078-black-and-tan_coonhound
n02095314_996.jpg n02089078-black-and-tan_coonhound
n02095314_969.jpg n02089078-black-and-tan_coonhound
n02095314_963.jpg n02089078-black-and-tan_coonhound
n02092002_10911-0.jpg n02091831-Saluki
n02092002_11088-0.jpg n02091831-Saluki
n02092002_1029-0.jpg n02091831-Saluki
n02092002_109-0.jpg n02091831-Saluki
n02092002_1130-0.jpg n02091831-Saluki
n02092002_10693-0.jpg n02091831-Saluki

n02092002_11390-0.jpg n02091831-Saluki
n02092002_1147-0.jpg n02091831-Saluki
n02092002_11131-0.jpg n02091831-Saluki
n02092002_11428-0.jpg n02091831-Saluki
n02092002_1086-1.jpg n02091831-Saluki
n02092002_1086-0.jpg n02091831-Saluki
n02092002_11087-0.jpg n02091831-Saluki
n02092002_10699-0.jpg n02091831-Saluki
n02092002_11459-0.jpg n02091831-Saluki
n02092002_11105-0.jpg n02091831-Saluki
n02092002_11245-0.jpg n02091831-Saluki
n02092002_11105-1.jpg n02091831-Saluki
n02092002_10060-0.jpg n02091831-Saluki
n02092002_13372-0.jpg n02091831-Saluki
n02092002_14369-0.jpg n02091831-Saluki
n02092002_15064-0.jpg n02091831-Saluki
n02092002_15064-1.jpg n02091831-Saluki
n02092002_1253-0.jpg n02091831-Saluki
n02092002_12394-0.jpg n02091831-Saluki
n02092002_12977-0.jpg n02091831-Saluki
n02092002_14825-0.jpg n02091831-Saluki
n02092002_13159-0.jpg n02091831-Saluki
n02092002_1200-0.jpg n02091831-Saluki
n02092002_14540-0.jpg n02091831-Saluki
n02092002_1242-0.jpg n02091831-Saluki
n02092002_120-0.jpg n02091831-Saluki
n02092002_12595-0.jpg n02091831-Saluki
n02092002_12544-0.jpg n02091831-Saluki
n02092002_1339-0.jpg n02091831-Saluki
n02092002_12828-0.jpg n02091831-Saluki
n02092002_12414-0.jpg n02091831-Saluki
n02092002_15096-0.jpg n02091831-Saluki
n02092002_14102-0.jpg n02091831-Saluki
n02092002_1439-0.jpg n02091831-Saluki
n02092002_14771-0.jpg n02091831-Saluki
n02092002_14567-0.jpg n02091831-Saluki
n02092002_149-0.jpg n02091831-Saluki
n02092002_13380-0.jpg n02091831-Saluki
n02092002_14858-0.jpg n02091831-Saluki
n02092002_1170-0.jpg n02091831-Saluki
n02092002_14315-0.jpg n02091831-Saluki
n02092002_14917-0.jpg n02091831-Saluki
n02092002_1438-0.jpg n02091831-Saluki
n02092002_1153-0.jpg n02091831-Saluki
n02092002_15010-0.jpg n02091831-Saluki
n02092002_1451-0.jpg n02091831-Saluki
n02092002_13565-0.jpg n02091831-Saluki
n02092002_1962-0.jpg n02091831-Saluki
n02092002_2269-0.jpg n02091831-Saluki
n02092002_15198-0.jpg n02091831-Saluki
n02092002_2184-0.jpg n02091831-Saluki
n02092002_1551-0.jpg n02091831-Saluki
n02092002_1551-1.jpg n02091831-Saluki
n02092002_15354-0.jpg n02091831-Saluki
n02092002_1608-0.jpg n02091831-Saluki
n02092002_1698-0.jpg n02091831-Saluki
n02092002_15215-0.jpg n02091831-Saluki
n02092002_1730-0.jpg n02091831-Saluki
n02092002_1693-0.jpg n02091831-Saluki
n02092002_1601-0.jpg n02091831-Saluki
n02092002_2217-0.jpg n02091831-Saluki
n02092002_1646-0.jpg n02091831-Saluki
n02092002_1564-0.jpg n02091831-Saluki
n02092002_2097-0.jpg n02091831-Saluki
n02092002_1828-0.jpg n02091831-Saluki
n02092002_2008-0.jpg n02091831-Saluki
n02092002_1592-0.jpg n02091831-Saluki
n02092002_2257-0.jpg n02091831-Saluki
n02092002_198-0.jpg n02091831-Saluki
n02092002_1767-0.jpg n02091831-Saluki
n02092002_15165-0.jpg n02091831-Saluki
n02092002_15342-0.jpg n02091831-Saluki

n02092002_15112-0.jpg n02091831-Saluki
n02092002_2129-0.jpg n02091831-Saluki
n02092002_1890-0.jpg n02091831-Saluki
n02092002_1937-0.jpg n02091831-Saluki
n02092002_1937-1.jpg n02091831-Saluki
n02092002_1583-0.jpg n02091831-Saluki
n02092002_1727-0.jpg n02091831-Saluki
n02092002_3460-0.jpg n02091831-Saluki
n02092002_3867-0.jpg n02091831-Saluki
n02092002_3500-0.jpg n02091831-Saluki
n02092002_296-0.jpg n02091831-Saluki
n02092002_3301-0.jpg n02091831-Saluki
n02092002_2859-0.jpg n02091831-Saluki
n02092002_3314-0.jpg n02091831-Saluki
n02092002_2372-0.jpg n02091831-Saluki
n02092002_2311-0.jpg n02091831-Saluki
n02092002_3343-0.jpg n02091831-Saluki
n02092002_2448-0.jpg n02091831-Saluki
n02092002_3968-0.jpg n02091831-Saluki
n02092002_2666-0.jpg n02091831-Saluki
n02092002_3-0.jpg n02091831-Saluki
n02092002_3856-0.jpg n02091831-Saluki
n02092002_348-0.jpg n02091831-Saluki
n02092002_2558-0.jpg n02091831-Saluki
n02092002_3485-0.jpg n02091831-Saluki
n02092002_2590-0.jpg n02091831-Saluki
n02092002_2851-0.jpg n02091831-Saluki
n02092002_305-0.jpg n02091831-Saluki
n02092002_3494-0.jpg n02091831-Saluki
n02092002_3271-0.jpg n02091831-Saluki
n02092002_2294-0.jpg n02091831-Saluki
n02092002_293-0.jpg n02091831-Saluki
n02092002_228-0.jpg n02091831-Saluki
n02092002_3400-0.jpg n02091831-Saluki
n02092002_2981-0.jpg n02091831-Saluki
n02092002_3861-0.jpg n02091831-Saluki
n02092002_2723-0.jpg n02091831-Saluki
n02092002_4220-0.jpg n02091831-Saluki
n02092002_4338-0.jpg n02091831-Saluki
n02092002_5202-0.jpg n02091831-Saluki
n02092002_4555-0.jpg n02091831-Saluki
n02092002_498-0.jpg n02091831-Saluki
n02092002_4898-0.jpg n02091831-Saluki
n02092002_4218-0.jpg n02091831-Saluki
n02092002_4745-0.jpg n02091831-Saluki
n02092002_5222-0.jpg n02091831-Saluki
n02092002_4134-0.jpg n02091831-Saluki
n02092002_4596-0.jpg n02091831-Saluki
n02092002_4596-1.jpg n02091831-Saluki
n02092002_49-0.jpg n02091831-Saluki
n02092002_49-1.jpg n02091831-Saluki
n02092002_4118-0.jpg n02091831-Saluki
n02092002_4131-0.jpg n02091831-Saluki
n02092002_3988-0.jpg n02091831-Saluki
n02092002_4258-0.jpg n02091831-Saluki
n02092002_4394-0.jpg n02091831-Saluki
n02092002_4657-0.jpg n02091831-Saluki
n02092002_4337-1.jpg n02091831-Saluki
n02092002_4337-0.jpg n02091831-Saluki
n02092002_4337-2.jpg n02091831-Saluki
n02092002_4517-0.jpg n02091831-Saluki
n02092002_4230-0.jpg n02091831-Saluki
n02092002_5152-0.jpg n02091831-Saluki
n02092002_4921-0.jpg n02091831-Saluki
n02092002_4296-0.jpg n02091831-Saluki
n02092002_4545-0.jpg n02091831-Saluki
n02092002_4169-0.jpg n02091831-Saluki
n02092002_5008-1.jpg n02091831-Saluki
n02092002_5008-0.jpg n02091831-Saluki
n02092002_5960-0.jpg n02091831-Saluki
n02092002_5915-0.jpg n02091831-Saluki
n02092002_5668-0.jpg n02091831-Saluki

n02092002_5664-0.jpg n02091831-Saluki
n02092002_5437-0.jpg n02091831-Saluki
n02092002_5226-0.jpg n02091831-Saluki
n02092002_6001-0.jpg n02091831-Saluki
n02092002_5746-0.jpg n02091831-Saluki
n02092002_5746-1.jpg n02091831-Saluki
n02092002_5557-0.jpg n02091831-Saluki
n02092002_5617-0.jpg n02091831-Saluki
n02092002_5246-1.jpg n02091831-Saluki
n02092002_5246-0.jpg n02091831-Saluki
n02092002_5936-0.jpg n02091831-Saluki
n02092002_5504-0.jpg n02091831-Saluki
n02092002_5335-0.jpg n02091831-Saluki
n02092002_525-0.jpg n02091831-Saluki
n02092002_5462-0.jpg n02091831-Saluki
n02092002_5377-0.jpg n02091831-Saluki
n02092002_5652-0.jpg n02091831-Saluki
n02092002_5916-0.jpg n02091831-Saluki
n02092002_6508-0.jpg n02091831-Saluki
n02092002_6518-0.jpg n02091831-Saluki
n02092002_6609-0.jpg n02091831-Saluki
n02092002_6575-0.jpg n02091831-Saluki
n02092002_6007-0.jpg n02091831-Saluki
n02092002_6534-0.jpg n02091831-Saluki
n02092002_662-0.jpg n02091831-Saluki
n02092002_6503-0.jpg n02091831-Saluki
n02092002_6003-0.jpg n02091831-Saluki
n02092002_6114-0.jpg n02091831-Saluki
n02092002_6226-0.jpg n02091831-Saluki
n02092002_6041-0.jpg n02091831-Saluki
n02092002_6585-0.jpg n02091831-Saluki
n02092002_6380-0.jpg n02091831-Saluki
n02092002_6339-0.jpg n02091831-Saluki
n02092002_6180-0.jpg n02091831-Saluki
n02092002_6339-1.jpg n02091831-Saluki
n02092002_6574-0.jpg n02091831-Saluki
n02092002_6302-0.jpg n02091831-Saluki
n02092002_6618-0.jpg n02091831-Saluki
n02092002_6040-0.jpg n02091831-Saluki
n02092002_7539-0.jpg n02091831-Saluki
n02092002_6963-0.jpg n02091831-Saluki
n02092002_6735-0.jpg n02091831-Saluki
n02092002_7160-0.jpg n02091831-Saluki
n02092002_7160-1.jpg n02091831-Saluki
n02092002_6953-0.jpg n02091831-Saluki
n02092002_7206-0.jpg n02091831-Saluki
n02092002_7172-0.jpg n02091831-Saluki
n02092002_6698-0.jpg n02091831-Saluki
n02092002_692-0.jpg n02091831-Saluki
n02092002_6695-0.jpg n02091831-Saluki
n02092002_6702-0.jpg n02091831-Saluki
n02092002_6780-0.jpg n02091831-Saluki
n02092002_7099-0.jpg n02091831-Saluki
n02092002_7181-0.jpg n02091831-Saluki
n02092002_6915-0.jpg n02091831-Saluki
n02092002_7473-0.jpg n02091831-Saluki
n02092002_6907-0.jpg n02091831-Saluki
n02092002_7314-0.jpg n02091831-Saluki
n02092002_6625-0.jpg n02091831-Saluki
n02092002_7268-0.jpg n02091831-Saluki
n02092002_6621-0.jpg n02091831-Saluki
n02092002_6827-0.jpg n02091831-Saluki
n02092002_7537-0.jpg n02091831-Saluki
n02092002_7165-0.jpg n02091831-Saluki
n02092002_6895-0.jpg n02091831-Saluki
n02092002_759-0.jpg n02091831-Saluki
n02092002_6914-0.jpg n02091831-Saluki
n02092002_6978-0.jpg n02091831-Saluki
n02092002_6955-0.jpg n02091831-Saluki
n02092002_700-0.jpg n02091831-Saluki
n02092002_6729-0.jpg n02091831-Saluki
n02092002_6723-0.jpg n02091831-Saluki

n02092002_7696-0.jpg n02091831-Saluki
n02092002_9895-0.jpg n02091831-Saluki
n02092002_7791-0.jpg n02091831-Saluki
n02092002_854-0.jpg n02091831-Saluki
n02092002_8952-0.jpg n02091831-Saluki
n02092002_9656-0.jpg n02091831-Saluki
n02092002_7890-0.jpg n02091831-Saluki
n02092002_983-0.jpg n02091831-Saluki
n02092002_9863-0.jpg n02091831-Saluki
n02092002_7835-0.jpg n02091831-Saluki
n02092002_7667-0.jpg n02091831-Saluki
n02092002_7743-0.jpg n02091831-Saluki
n02092002_817-0.jpg n02091831-Saluki
n02092002_9862-0.jpg n02091831-Saluki
n02092002_9224-0.jpg n02091831-Saluki
n02092002_885-0.jpg n02091831-Saluki
n02092002_86-0.jpg n02091831-Saluki
n02092002_847-0.jpg n02091831-Saluki
n02092002_846-0.jpg n02091831-Saluki
n02092002_7825-0.jpg n02091831-Saluki
n02092002_9071-0.jpg n02091831-Saluki
n02092002_942-0.jpg n02091831-Saluki
n02092002_9785-0.jpg n02091831-Saluki
n02092002_7751-0.jpg n02091831-Saluki
n02092002_10911.jpg n02091831-Saluki
n02092002_11088.jpg n02091831-Saluki
n02092002_1130.jpg n02091831-Saluki
n02092002_109.jpg n02091831-Saluki
n02092002_10693.jpg n02091831-Saluki
n02092002_1029.jpg n02091831-Saluki
n02092002_11390.jpg n02091831-Saluki
n02092002_1147.jpg n02091831-Saluki
n02092002_11131.jpg n02091831-Saluki
n02092002_11428.jpg n02091831-Saluki
n02092002_1086.jpg n02091831-Saluki
n02092002_11087.jpg n02091831-Saluki
n02092002_11459.jpg n02091831-Saluki
n02092002_10699.jpg n02091831-Saluki
n02092002_11105.jpg n02091831-Saluki
n02092002_11245.jpg n02091831-Saluki
n02092002_10060.jpg n02091831-Saluki
n02092002_13372.jpg n02091831-Saluki
n02092002_14369.jpg n02091831-Saluki
n02092002_15064.jpg n02091831-Saluki
n02092002_1253.jpg n02091831-Saluki
n02092002_12394.jpg n02091831-Saluki
n02092002_12977.jpg n02091831-Saluki
n02092002_14825.jpg n02091831-Saluki
n02092002_13159.jpg n02091831-Saluki
n02092002_1200.jpg n02091831-Saluki
n02092002_14540.jpg n02091831-Saluki
n02092002_1242.jpg n02091831-Saluki
n02092002_120.jpg n02091831-Saluki
n02092002_12595.jpg n02091831-Saluki
n02092002_12544.jpg n02091831-Saluki
n02092002_1339.jpg n02091831-Saluki
n02092002_12828.jpg n02091831-Saluki
n02092002_15096.jpg n02091831-Saluki
n02092002_12414.jpg n02091831-Saluki
n02092002_14102.jpg n02091831-Saluki
n02092002_1439.jpg n02091831-Saluki
n02092002_14771.jpg n02091831-Saluki
n02092002_14567.jpg n02091831-Saluki
n02092002_149.jpg n02091831-Saluki
n02092002_13380.jpg n02091831-Saluki
n02092002_14858.jpg n02091831-Saluki
n02092002_1170.jpg n02091831-Saluki
n02092002_14315.jpg n02091831-Saluki
n02092002_14917.jpg n02091831-Saluki
n02092002_1438.jpg n02091831-Saluki
n02092002_1153.jpg n02091831-Saluki
n02092002_15010.jpg n02091831-Saluki

n02092002_1451.jpg n02091831-Saluki
n02092002_13565.jpg n02091831-Saluki
n02092002_1962.jpg n02091831-Saluki
n02092002_15198.jpg n02091831-Saluki
n02092002_2269.jpg n02091831-Saluki
n02092002_2184.jpg n02091831-Saluki
n02092002_1551.jpg n02091831-Saluki
n02092002_15354.jpg n02091831-Saluki
n02092002_1608.jpg n02091831-Saluki
n02092002_1698.jpg n02091831-Saluki
n02092002_1730.jpg n02091831-Saluki
n02092002_15215.jpg n02091831-Saluki
n02092002_1693.jpg n02091831-Saluki
n02092002_2217.jpg n02091831-Saluki
n02092002_1601.jpg n02091831-Saluki
n02092002_1646.jpg n02091831-Saluki
n02092002_1564.jpg n02091831-Saluki
n02092002_2097.jpg n02091831-Saluki
n02092002_1828.jpg n02091831-Saluki
n02092002_2008.jpg n02091831-Saluki
n02092002_1592.jpg n02091831-Saluki
n02092002_2257.jpg n02091831-Saluki
n02092002_198.jpg n02091831-Saluki
n02092002_1767.jpg n02091831-Saluki
n02092002_15165.jpg n02091831-Saluki
n02092002_15342.jpg n02091831-Saluki
n02092002_15112.jpg n02091831-Saluki
n02092002_2129.jpg n02091831-Saluki
n02092002_1890.jpg n02091831-Saluki
n02092002_1937.jpg n02091831-Saluki
n02092002_1583.jpg n02091831-Saluki
n02092002_1727.jpg n02091831-Saluki
n02092002_3460.jpg n02091831-Saluki
n02092002_3867.jpg n02091831-Saluki
n02092002_3500.jpg n02091831-Saluki
n02092002_296.jpg n02091831-Saluki
n02092002_3301.jpg n02091831-Saluki
n02092002_2859.jpg n02091831-Saluki
n02092002_3314.jpg n02091831-Saluki
n02092002_2372.jpg n02091831-Saluki
n02092002_2311.jpg n02091831-Saluki
n02092002_3343.jpg n02091831-Saluki
n02092002_2448.jpg n02091831-Saluki
n02092002_3968.jpg n02091831-Saluki
n02092002_2666.jpg n02091831-Saluki
n02092002_3.jpg n02091831-Saluki
n02092002_3856.jpg n02091831-Saluki
n02092002_2558.jpg n02091831-Saluki
n02092002_348.jpg n02091831-Saluki
n02092002_3485.jpg n02091831-Saluki
n02092002_2590.jpg n02091831-Saluki
n02092002_2851.jpg n02091831-Saluki
n02092002_305.jpg n02091831-Saluki
n02092002_3494.jpg n02091831-Saluki
n02092002_3271.jpg n02091831-Saluki
n02092002_2294.jpg n02091831-Saluki
n02092002_293.jpg n02091831-Saluki
n02092002_228.jpg n02091831-Saluki
n02092002_3400.jpg n02091831-Saluki
n02092002_2981.jpg n02091831-Saluki
n02092002_3861.jpg n02091831-Saluki
n02092002_2723.jpg n02091831-Saluki
n02092002_4220.jpg n02091831-Saluki
n02092002_4338.jpg n02091831-Saluki
n02092002_5202.jpg n02091831-Saluki
n02092002_4555.jpg n02091831-Saluki
n02092002_498.jpg n02091831-Saluki
n02092002_4898.jpg n02091831-Saluki
n02092002_4218.jpg n02091831-Saluki
n02092002_4745.jpg n02091831-Saluki
n02092002_5222.jpg n02091831-Saluki
n02092002_4134.jpg n02091831-Saluki

n02092002_4596.jpg n02091831-Saluki
n02092002_49.jpg n02091831-Saluki
n02092002_4118.jpg n02091831-Saluki
n02092002_4131.jpg n02091831-Saluki
n02092002_3988.jpg n02091831-Saluki
n02092002_4258.jpg n02091831-Saluki
n02092002_4394.jpg n02091831-Saluki
n02092002_4657.jpg n02091831-Saluki
n02092002_4337.jpg n02091831-Saluki
n02092002_4517.jpg n02091831-Saluki
n02092002_4230.jpg n02091831-Saluki
n02092002_5152.jpg n02091831-Saluki
n02092002_4921.jpg n02091831-Saluki
n02092002_4296.jpg n02091831-Saluki
n02092002_4545.jpg n02091831-Saluki
n02092002_4169.jpg n02091831-Saluki
n02092002_5008.jpg n02091831-Saluki
n02092002_5960.jpg n02091831-Saluki
n02092002_5915.jpg n02091831-Saluki
n02092002_5668.jpg n02091831-Saluki
n02092002_5664.jpg n02091831-Saluki
n02092002_5437.jpg n02091831-Saluki
n02092002_5226.jpg n02091831-Saluki
n02092002_6001.jpg n02091831-Saluki
n02092002_5746.jpg n02091831-Saluki
n02092002_5617.jpg n02091831-Saluki
n02092002_5557.jpg n02091831-Saluki
n02092002_5246.jpg n02091831-Saluki
n02092002_5936.jpg n02091831-Saluki
n02092002_5504.jpg n02091831-Saluki
n02092002_5335.jpg n02091831-Saluki
n02092002_525.jpg n02091831-Saluki
n02092002_5462.jpg n02091831-Saluki
n02092002_5377.jpg n02091831-Saluki
n02092002_5652.jpg n02091831-Saluki
n02092002_5916.jpg n02091831-Saluki
n02092002_6508.jpg n02091831-Saluki
n02092002_6518.jpg n02091831-Saluki
n02092002_6609.jpg n02091831-Saluki
n02092002_6575.jpg n02091831-Saluki
n02092002_6007.jpg n02091831-Saluki
n02092002_6534.jpg n02091831-Saluki
n02092002_662.jpg n02091831-Saluki
n02092002_6503.jpg n02091831-Saluki
n02092002_6003.jpg n02091831-Saluki
n02092002_6114.jpg n02091831-Saluki
n02092002_6226.jpg n02091831-Saluki
n02092002_6041.jpg n02091831-Saluki
n02092002_6585.jpg n02091831-Saluki
n02092002_6380.jpg n02091831-Saluki
n02092002_6180.jpg n02091831-Saluki
n02092002_6339.jpg n02091831-Saluki
n02092002_6574.jpg n02091831-Saluki
n02092002_6302.jpg n02091831-Saluki
n02092002_6618.jpg n02091831-Saluki
n02092002_6040.jpg n02091831-Saluki
n02092002_7539.jpg n02091831-Saluki
n02092002_6963.jpg n02091831-Saluki
n02092002_6735.jpg n02091831-Saluki
n02092002_7160.jpg n02091831-Saluki
n02092002_6953.jpg n02091831-Saluki
n02092002_7206.jpg n02091831-Saluki
n02092002_7172.jpg n02091831-Saluki
n02092002_6698.jpg n02091831-Saluki
n02092002_692.jpg n02091831-Saluki
n02092002_6695.jpg n02091831-Saluki
n02092002_6702.jpg n02091831-Saluki
n02092002_6780.jpg n02091831-Saluki
n02092002_7099.jpg n02091831-Saluki
n02092002_7181.jpg n02091831-Saluki
n02092002_7473.jpg n02091831-Saluki
n02092002_6915.jpg n02091831-Saluki

n02092002_6907.jpg n02091831-Saluki
n02092002_7314.jpg n02091831-Saluki
n02092002_6625.jpg n02091831-Saluki
n02092002_7268.jpg n02091831-Saluki
n02092002_6621.jpg n02091831-Saluki
n02092002_6827.jpg n02091831-Saluki
n02092002_7165.jpg n02091831-Saluki
n02092002_7537.jpg n02091831-Saluki
n02092002_6895.jpg n02091831-Saluki
n02092002_759.jpg n02091831-Saluki
n02092002_6914.jpg n02091831-Saluki
n02092002_6978.jpg n02091831-Saluki
n02092002_6955.jpg n02091831-Saluki
n02092002_700.jpg n02091831-Saluki
n02092002_6729.jpg n02091831-Saluki
n02092002_6723.jpg n02091831-Saluki
n02092002_7696.jpg n02091831-Saluki
n02092002_9895.jpg n02091831-Saluki
n02092002_7791.jpg n02091831-Saluki
n02092002_854.jpg n02091831-Saluki
n02092002_9656.jpg n02091831-Saluki
n02092002_8952.jpg n02091831-Saluki
n02092002_7890.jpg n02091831-Saluki
n02092002_983.jpg n02091831-Saluki
n02092002_9863.jpg n02091831-Saluki
n02092002_7835.jpg n02091831-Saluki
n02092002_7667.jpg n02091831-Saluki
n02092002_7743.jpg n02091831-Saluki
n02092002_817.jpg n02091831-Saluki
n02092002_9862.jpg n02091831-Saluki
n02092002_9224.jpg n02091831-Saluki
n02092002_885.jpg n02091831-Saluki
n02092002_86.jpg n02091831-Saluki
n02092002_846.jpg n02091831-Saluki
n02092002_847.jpg n02091831-Saluki
n02092002_7825.jpg n02091831-Saluki
n02092002_9071.jpg n02091831-Saluki
n02092002_942.jpg n02091831-Saluki
n02092002_9785.jpg n02091831-Saluki
n02092002_7751.jpg n02091831-Saluki
n02089078_1174-0.jpg n02091831-Saluki
n02089078_1026-0.jpg n02091831-Saluki
n02089078_1275-0.jpg n02091831-Saluki
n02089078_141-0.jpg n02091831-Saluki
n02089078_1366-0.jpg n02091831-Saluki
n02089078_1245-0.jpg n02091831-Saluki
n02089078_1617-0.jpg n02091831-Saluki
n02089078_1472-0.jpg n02091831-Saluki
n02089078_1629-0.jpg n02091831-Saluki
n02089078_1304-0.jpg n02091831-Saluki
n02089078_1025-0.jpg n02091831-Saluki
n02089078_111-0.jpg n02091831-Saluki
n02089078_1021-0.jpg n02091831-Saluki
n02089078_1454-0.jpg n02091831-Saluki
n02089078_1064-0.jpg n02091831-Saluki
n02089078_1151-0.jpg n02091831-Saluki
n02089078_188-0.jpg n02091831-Saluki
n02089078_1668-0.jpg n02091831-Saluki
n02089078_19-0.jpg n02091831-Saluki
n02089078_2108-0.jpg n02091831-Saluki
n02089078_2174-0.jpg n02091831-Saluki
n02089078_1967-0.jpg n02091831-Saluki
n02089078_192-0.jpg n02091831-Saluki
n02089078_2025-0.jpg n02091831-Saluki
n02089078_1825-0.jpg n02091831-Saluki
n02089078_1758-0.jpg n02091831-Saluki
n02089078_1842-0.jpg n02091831-Saluki
n02089078_2106-0.jpg n02091831-Saluki
n02089078_1681-0.jpg n02091831-Saluki
n02089078_176-0.jpg n02091831-Saluki
n02089078_1962-0.jpg n02091831-Saluki
n02089078_1793-0.jpg n02091831-Saluki

n02089078_2032-0.jpg n02091831-Saluki
n02089078_1867-0.jpg n02091831-Saluki
n02089078_1744-0.jpg n02091831-Saluki
n02089078_1836-0.jpg n02091831-Saluki
n02089078_1735-0.jpg n02091831-Saluki
n02089078_2021-0.jpg n02091831-Saluki
n02089078_183-0.jpg n02091831-Saluki
n02089078_1951-0.jpg n02091831-Saluki
n02089078_2110-0.jpg n02091831-Saluki
n02089078_185-0.jpg n02091831-Saluki
n02089078_1680-0.jpg n02091831-Saluki
n02089078_2404-0.jpg n02091831-Saluki
n02089078_2282-0.jpg n02091831-Saluki
n02089078_2337-0.jpg n02091831-Saluki
n02089078_2753-0.jpg n02091831-Saluki
n02089078_2801-0.jpg n02091831-Saluki
n02089078_2227-0.jpg n02091831-Saluki
n02089078_2270-0.jpg n02091831-Saluki
n02089078_2841-0.jpg n02091831-Saluki
n02089078_2829-0.jpg n02091831-Saluki
n02089078_237-0.jpg n02091831-Saluki
n02089078_2728-0.jpg n02091831-Saluki
n02089078_2596-0.jpg n02091831-Saluki
n02089078_2478-0.jpg n02091831-Saluki
n02089078_2417-0.jpg n02091831-Saluki
n02089078_222-0.jpg n02091831-Saluki
n02089078_2464-0.jpg n02091831-Saluki
n02089078_2498-0.jpg n02091831-Saluki
n02089078_269-0.jpg n02091831-Saluki
n02089078_2574-0.jpg n02091831-Saluki
n02089078_2294-0.jpg n02091831-Saluki
n02089078_243-0.jpg n02091831-Saluki
n02089078_2794-0.jpg n02091831-Saluki
n02089078_2232-0.jpg n02091831-Saluki
n02089078_2542-0.jpg n02091831-Saluki
n02089078_2476-0.jpg n02091831-Saluki
n02089078_2333-0.jpg n02091831-Saluki
n02089078_256-0.jpg n02091831-Saluki
n02089078_2684-0.jpg n02091831-Saluki
n02089078_2225-0.jpg n02091831-Saluki
n02089078_3188-0.jpg n02091831-Saluki
n02089078_3613-0.jpg n02091831-Saluki
n02089078_2921-0.jpg n02091831-Saluki
n02089078_2903-0.jpg n02091831-Saluki
n02089078_2962-0.jpg n02091831-Saluki
n02089078_3340-0.jpg n02091831-Saluki
n02089078_3543-0.jpg n02091831-Saluki
n02089078_3051-0.jpg n02091831-Saluki
n02089078_314-0.jpg n02091831-Saluki
n02089078_3182-0.jpg n02091831-Saluki
n02089078_3355-0.jpg n02091831-Saluki
n02089078_2935-0.jpg n02091831-Saluki
n02089078_324-0.jpg n02091831-Saluki
n02089078_3532-0.jpg n02091831-Saluki
n02089078_3419-0.jpg n02091831-Saluki
n02089078_3191-0.jpg n02091831-Saluki
n02089078_3648-0.jpg n02091831-Saluki
n02089078_3615-0.jpg n02091831-Saluki
n02089078_3078-0.jpg n02091831-Saluki
n02089078_353-0.jpg n02091831-Saluki
n02089078_3183-0.jpg n02091831-Saluki
n02089078_3443-0.jpg n02091831-Saluki
n02089078_302-0.jpg n02091831-Saluki
n02089078_3412-0.jpg n02091831-Saluki
n02089078_2934-0.jpg n02091831-Saluki
n02089078_3134-0.jpg n02091831-Saluki
n02089078_3038-0.jpg n02091831-Saluki
n02089078_3196-0.jpg n02091831-Saluki
n02089078_3440-0.jpg n02091831-Saluki
n02089078_351-0.jpg n02091831-Saluki
n02089078_2957-0.jpg n02091831-Saluki
n02089078_3081-0.jpg n02091831-Saluki

n02089078_3088-0.jpg n02091831-Saluki
n02089078_3807-0.jpg n02091831-Saluki
n02089078_4024-0.jpg n02091831-Saluki
n02089078_4441-0.jpg n02091831-Saluki
n02089078_4422-0.jpg n02091831-Saluki
n02089078_393-0.jpg n02091831-Saluki
n02089078_4362-0.jpg n02091831-Saluki
n02089078_3923-0.jpg n02091831-Saluki
n02089078_4065-0.jpg n02091831-Saluki
n02089078_4186-0.jpg n02091831-Saluki
n02089078_3681-0.jpg n02091831-Saluki
n02089078_445-0.jpg n02091831-Saluki
n02089078_3932-0.jpg n02091831-Saluki
n02089078_3869-0.jpg n02091831-Saluki
n02089078_3810-0.jpg n02091831-Saluki
n02089078_4497-0.jpg n02091831-Saluki
n02089078_3821-0.jpg n02091831-Saluki
n02089078_4331-0.jpg n02091831-Saluki
n02089078_404-0.jpg n02091831-Saluki
n02089078_3759-0.jpg n02091831-Saluki
n02089078_4-0.jpg n02091831-Saluki
n02089078_4312-0.jpg n02091831-Saluki
n02089078_4098-0.jpg n02091831-Saluki
n02089078_3760-0.jpg n02091831-Saluki
n02089078_3914-0.jpg n02091831-Saluki
n02089078_3652-0.jpg n02091831-Saluki
n02089078_3893-0.jpg n02091831-Saluki
n02089078_4466-0.jpg n02091831-Saluki
n02089078_4140-0.jpg n02091831-Saluki
n02089078_376-0.jpg n02091831-Saluki
n02089078_695-0.jpg n02091831-Saluki
n02089078_456-0.jpg n02091831-Saluki
n02089078_727-0.jpg n02091831-Saluki
n02089078_4544-0.jpg n02091831-Saluki
n02089078_464-0.jpg n02091831-Saluki
n02089078_782-0.jpg n02091831-Saluki
n02089078_45-0.jpg n02091831-Saluki
n02089078_965-0.jpg n02091831-Saluki
n02089078_901-0.jpg n02091831-Saluki
n02089078_682-0.jpg n02091831-Saluki
n02089078_482-0.jpg n02091831-Saluki
n02089078_641-0.jpg n02091831-Saluki
n02089078_877-0.jpg n02091831-Saluki
n02089078_4508-0.jpg n02091831-Saluki
n02089078_715-0.jpg n02091831-Saluki
n02089078_663-0.jpg n02091831-Saluki
n02089078_465-0.jpg n02091831-Saluki
n02089078_779-0.jpg n02091831-Saluki
n02089078_933-0.jpg n02091831-Saluki
n02089078_80-0.jpg n02091831-Saluki
n02089078_944-0.jpg n02091831-Saluki
n02089078_52-0.jpg n02091831-Saluki
n02089078_461-0.jpg n02091831-Saluki
n02089078_502-0.jpg n02091831-Saluki
n02089078_825-0.jpg n02091831-Saluki
n02089078_1174.jpg n02091831-Saluki
n02089078_1026.jpg n02091831-Saluki
n02089078_1275.jpg n02091831-Saluki
n02089078_141.jpg n02091831-Saluki
n02089078_1366.jpg n02091831-Saluki
n02089078_1245.jpg n02091831-Saluki
n02089078_1472.jpg n02091831-Saluki
n02089078_1617.jpg n02091831-Saluki
n02089078_1629.jpg n02091831-Saluki
n02089078_1304.jpg n02091831-Saluki
n02089078_1025.jpg n02091831-Saluki
n02089078_1021.jpg n02091831-Saluki
n02089078_111.jpg n02091831-Saluki
n02089078_1454.jpg n02091831-Saluki
n02089078_1064.jpg n02091831-Saluki
n02089078_1151.jpg n02091831-Saluki
n02089078_188.jpg n02091831-Saluki

n02089078_1668.jpg n02091831-Saluki
n02089078_19.jpg n02091831-Saluki
n02089078_2108.jpg n02091831-Saluki
n02089078_2174.jpg n02091831-Saluki
n02089078_192.jpg n02091831-Saluki
n02089078_1967.jpg n02091831-Saluki
n02089078_2025.jpg n02091831-Saluki
n02089078_1825.jpg n02091831-Saluki
n02089078_1758.jpg n02091831-Saluki
n02089078_2106.jpg n02091831-Saluki
n02089078_1842.jpg n02091831-Saluki
n02089078_1681.jpg n02091831-Saluki
n02089078_176.jpg n02091831-Saluki
n02089078_1962.jpg n02091831-Saluki
n02089078_1793.jpg n02091831-Saluki
n02089078_2032.jpg n02091831-Saluki
n02089078_1867.jpg n02091831-Saluki
n02089078_1744.jpg n02091831-Saluki
n02089078_1836.jpg n02091831-Saluki
n02089078_1735.jpg n02091831-Saluki
n02089078_2021.jpg n02091831-Saluki
n02089078_183.jpg n02091831-Saluki
n02089078_1951.jpg n02091831-Saluki
n02089078_2110.jpg n02091831-Saluki
n02089078_1680.jpg n02091831-Saluki
n02089078_185.jpg n02091831-Saluki
n02089078_2404.jpg n02091831-Saluki
n02089078_2282.jpg n02091831-Saluki
n02089078_2337.jpg n02091831-Saluki
n02089078_2753.jpg n02091831-Saluki
n02089078_2801.jpg n02091831-Saluki
n02089078_2227.jpg n02091831-Saluki
n02089078_2270.jpg n02091831-Saluki
n02089078_2841.jpg n02091831-Saluki
n02089078_2829.jpg n02091831-Saluki
n02089078_237.jpg n02091831-Saluki
n02089078_2728.jpg n02091831-Saluki
n02089078_2596.jpg n02091831-Saluki
n02089078_2478.jpg n02091831-Saluki
n02089078_222.jpg n02091831-Saluki
n02089078_2417.jpg n02091831-Saluki
n02089078_2464.jpg n02091831-Saluki
n02089078_2498.jpg n02091831-Saluki
n02089078_269.jpg n02091831-Saluki
n02089078_2574.jpg n02091831-Saluki
n02089078_2294.jpg n02091831-Saluki
n02089078_243.jpg n02091831-Saluki
n02089078_2794.jpg n02091831-Saluki
n02089078_2232.jpg n02091831-Saluki
n02089078_2542.jpg n02091831-Saluki
n02089078_2476.jpg n02091831-Saluki
n02089078_2333.jpg n02091831-Saluki
n02089078_256.jpg n02091831-Saluki
n02089078_2684.jpg n02091831-Saluki
n02089078_2225.jpg n02091831-Saluki
n02089078_3188.jpg n02091831-Saluki
n02089078_3613.jpg n02091831-Saluki
n02089078_2921.jpg n02091831-Saluki
n02089078_2903.jpg n02091831-Saluki
n02089078_2962.jpg n02091831-Saluki
n02089078_3340.jpg n02091831-Saluki
n02089078_3543.jpg n02091831-Saluki
n02089078_3051.jpg n02091831-Saluki
n02089078_314.jpg n02091831-Saluki
n02089078_3182.jpg n02091831-Saluki
n02089078_3355.jpg n02091831-Saluki
n02089078_2935.jpg n02091831-Saluki
n02089078_3532.jpg n02091831-Saluki
n02089078_324.jpg n02091831-Saluki
n02089078_3419.jpg n02091831-Saluki
n02089078_3191.jpg n02091831-Saluki
n02089078_3648.jpg n02091831-Saluki

n02089078_3615.jpg n02091831-Saluki
n02089078_3078.jpg n02091831-Saluki
n02089078_353.jpg n02091831-Saluki
n02089078_3183.jpg n02091831-Saluki
n02089078_3443.jpg n02091831-Saluki
n02089078_302.jpg n02091831-Saluki
n02089078_3412.jpg n02091831-Saluki
n02089078_2934.jpg n02091831-Saluki
n02089078_3134.jpg n02091831-Saluki
n02089078_3038.jpg n02091831-Saluki
n02089078_3196.jpg n02091831-Saluki
n02089078_3440.jpg n02091831-Saluki
n02089078_351.jpg n02091831-Saluki
n02089078_2957.jpg n02091831-Saluki
n02089078_3081.jpg n02091831-Saluki
n02089078_3088.jpg n02091831-Saluki
n02089078_3807.jpg n02091831-Saluki
n02089078_4024.jpg n02091831-Saluki
n02089078_4441.jpg n02091831-Saluki
n02089078_4422.jpg n02091831-Saluki
n02089078_393.jpg n02091831-Saluki
n02089078_4362.jpg n02091831-Saluki
n02089078_4186.jpg n02091831-Saluki
n02089078_4065.jpg n02091831-Saluki
n02089078_3923.jpg n02091831-Saluki
n02089078_3681.jpg n02091831-Saluki
n02089078_445.jpg n02091831-Saluki
n02089078_3932.jpg n02091831-Saluki
n02089078_3869.jpg n02091831-Saluki
n02089078_3810.jpg n02091831-Saluki
n02089078_4497.jpg n02091831-Saluki
n02089078_3821.jpg n02091831-Saluki
n02089078_4331.jpg n02091831-Saluki
n02089078_404.jpg n02091831-Saluki
n02089078_3759.jpg n02091831-Saluki
n02089078_4.jpg n02091831-Saluki
n02089078_4312.jpg n02091831-Saluki
n02089078_4098.jpg n02091831-Saluki
n02089078_3760.jpg n02091831-Saluki
n02089078_3914.jpg n02091831-Saluki
n02089078_3652.jpg n02091831-Saluki
n02089078_3893.jpg n02091831-Saluki
n02089078_4466.jpg n02091831-Saluki
n02089078_4140.jpg n02091831-Saluki
n02089078_376.jpg n02091831-Saluki
n02089078_695.jpg n02091831-Saluki
n02089078_456.jpg n02091831-Saluki
n02089078_727.jpg n02091831-Saluki
n02089078_4544.jpg n02091831-Saluki
n02089078_464.jpg n02091831-Saluki
n02089078_782.jpg n02091831-Saluki
n02089078_45.jpg n02091831-Saluki
n02089078_965.jpg n02091831-Saluki
n02089078_901.jpg n02091831-Saluki
n02089078_682.jpg n02091831-Saluki
n02089078_482.jpg n02091831-Saluki
n02089078_641.jpg n02091831-Saluki
n02089078_877.jpg n02091831-Saluki
n02089078_4508.jpg n02091831-Saluki
n02089078_715.jpg n02091831-Saluki
n02089078_465.jpg n02091831-Saluki
n02089078_663.jpg n02091831-Saluki
n02089078_779.jpg n02091831-Saluki
n02089078_933.jpg n02091831-Saluki
n02089078_80.jpg n02091831-Saluki
n02089078_52.jpg n02091831-Saluki
n02089078_944.jpg n02091831-Saluki
n02089078_461.jpg n02091831-Saluki
n02089078_502.jpg n02091831-Saluki
n02089078_825.jpg n02091831-Saluki
n02091831_10576-0.jpg n02091831-Saluki
n02091831_10290-0.jpg n02091831-Saluki

n02091831_1036-0.jpg n02091831-Saluki
n02091831_10215-0.jpg n02091831-Saluki
n02091831_10215-1.jpg n02091831-Saluki
n02091831_10733-0.jpg n02091831-Saluki
n02091831_10639-0.jpg n02091831-Saluki
n02091831_10722-0.jpg n02091831-Saluki
n02091831_10803-0.jpg n02091831-Saluki
n02091831_10593-0.jpg n02091831-Saluki
n02091831_12653-0.jpg n02091831-Saluki
n02091831_1565-0.jpg n02091831-Saluki
n02091831_11421-0.jpg n02091831-Saluki
n02091831_13354-0.jpg n02091831-Saluki
n02091831_13361-0.jpg n02091831-Saluki
n02091831_1110-0.jpg n02091831-Saluki
n02091831_1495-0.jpg n02091831-Saluki
n02091831_151-0.jpg n02091831-Saluki
n02091831_10823-0.jpg n02091831-Saluki
n02091831_13935-0.jpg n02091831-Saluki
n02091831_12881-0.jpg n02091831-Saluki
n02091831_13566-0.jpg n02091831-Saluki
n02091831_11553-0.jpg n02091831-Saluki
n02091831_1730-0.jpg n02091831-Saluki
n02091831_1696-1.jpg n02091831-Saluki
n02091831_1696-0.jpg n02091831-Saluki
n02091831_11498-0.jpg n02091831-Saluki
n02091831_11498-1.jpg n02091831-Saluki
n02091831_1182-0.jpg n02091831-Saluki
n02091831_12945-0.jpg n02091831-Saluki
n02091831_10822-0.jpg n02091831-Saluki
n02091831_1118-0.jpg n02091831-Saluki
n02091831_11177-0.jpg n02091831-Saluki
n02091831_13486-0.jpg n02091831-Saluki
n02091831_1400-0.jpg n02091831-Saluki
n02091831_1594-0.jpg n02091831-Saluki
n02091831_1594-1.jpg n02091831-Saluki
n02091831_13767-0.jpg n02091831-Saluki
n02091831_13640-0.jpg n02091831-Saluki
n02091831_1563-0.jpg n02091831-Saluki
n02091831_13774-0.jpg n02091831-Saluki
n02091831_1623-0.jpg n02091831-Saluki
n02091831_13536-0.jpg n02091831-Saluki
n02091831_1387-0.jpg n02091831-Saluki
n02091831_1507-0.jpg n02091831-Saluki
n02091831_13507-1.jpg n02091831-Saluki
n02091831_13507-0.jpg n02091831-Saluki
n02091831_1512-0.jpg n02091831-Saluki
n02091831_11224-0.jpg n02091831-Saluki
n02091831_10978-0.jpg n02091831-Saluki
n02091831_11021-0.jpg n02091831-Saluki
n02091831_1439-0.jpg n02091831-Saluki
n02091831_2245-0.jpg n02091831-Saluki
n02091831_2232-0.jpg n02091831-Saluki
n02091831_1801-0.jpg n02091831-Saluki
n02091831_2288-0.jpg n02091831-Saluki
n02091831_2779-0.jpg n02091831-Saluki
n02091831_2606-0.jpg n02091831-Saluki
n02091831_2391-0.jpg n02091831-Saluki
n02091831_2076-0.jpg n02091831-Saluki
n02091831_256-0.jpg n02091831-Saluki
n02091831_213-0.jpg n02091831-Saluki
n02091831_2290-0.jpg n02091831-Saluki
n02091831_1852-0.jpg n02091831-Saluki
n02091831_2344-0.jpg n02091831-Saluki
n02091831_2315-0.jpg n02091831-Saluki
n02091831_2362-0.jpg n02091831-Saluki
n02091831_2094-0.jpg n02091831-Saluki
n02091831_2338-0.jpg n02091831-Saluki
n02091831_2108-0.jpg n02091831-Saluki
n02091831_2638-0.jpg n02091831-Saluki
n02091831_2592-0.jpg n02091831-Saluki
n02091831_2586-0.jpg n02091831-Saluki
n02091831_2838-0.jpg n02091831-Saluki

n02091831_3061-0.jpg n02091831-Saluki
n02091831_2858-0.jpg n02091831-Saluki
n02091831_2962-0.jpg n02091831-Saluki
n02091831_3038-0.jpg n02091831-Saluki
n02091831_3334-0.jpg n02091831-Saluki
n02091831_346-0.jpg n02091831-Saluki
n02091831_3042-0.jpg n02091831-Saluki
n02091831_3433-0.jpg n02091831-Saluki
n02091831_3222-0.jpg n02091831-Saluki
n02091831_3430-1.jpg n02091831-Saluki
n02091831_3430-0.jpg n02091831-Saluki
n02091831_2880-0.jpg n02091831-Saluki
n02091831_3339-0.jpg n02091831-Saluki
n02091831_3064-0.jpg n02091831-Saluki
n02091831_3067-0.jpg n02091831-Saluki
n02091831_3300-0.jpg n02091831-Saluki
n02091831_3152-0.jpg n02091831-Saluki
n02091831_3238-0.jpg n02091831-Saluki
n02091831_3310-0.jpg n02091831-Saluki
n02091831_3254-0.jpg n02091831-Saluki
n02091831_3400-1.jpg n02091831-Saluki
n02091831_3400-0.jpg n02091831-Saluki
n02091831_2995-0.jpg n02091831-Saluki
n02091831_2911-0.jpg n02091831-Saluki
n02091831_3054-1.jpg n02091831-Saluki
n02091831_3054-0.jpg n02091831-Saluki
n02091831_3180-0.jpg n02091831-Saluki
n02091831_3180-1.jpg n02091831-Saluki
n02091831_351-0.jpg n02091831-Saluki
n02091831_3242-0.jpg n02091831-Saluki
n02091831_3242-1.jpg n02091831-Saluki
n02091831_304-0.jpg n02091831-Saluki
n02091831_3108-0.jpg n02091831-Saluki
n02091831_3052-0.jpg n02091831-Saluki
n02091831_4142-0.jpg n02091831-Saluki
n02091831_3643-0.jpg n02091831-Saluki
n02091831_3899-0.jpg n02091831-Saluki
n02091831_3616-1.jpg n02091831-Saluki
n02091831_3616-0.jpg n02091831-Saluki
n02091831_3616-2.jpg n02091831-Saluki
n02091831_38-0.jpg n02091831-Saluki
n02091831_3594-0.jpg n02091831-Saluki
n02091831_3797-0.jpg n02091831-Saluki
n02091831_4057-0.jpg n02091831-Saluki
n02091831_4246-0.jpg n02091831-Saluki
n02091831_4667-0.jpg n02091831-Saluki
n02091831_4259-0.jpg n02091831-Saluki
n02091831_4626-0.jpg n02091831-Saluki
n02091831_3909-0.jpg n02091831-Saluki
n02091831_4463-0.jpg n02091831-Saluki
n02091831_4755-0.jpg n02091831-Saluki
n02091831_410-0.jpg n02091831-Saluki
n02091831_3847-0.jpg n02091831-Saluki
n02091831_4030-0.jpg n02091831-Saluki
n02091831_3675-0.jpg n02091831-Saluki
n02091831_3962-0.jpg n02091831-Saluki
n02091831_4487-0.jpg n02091831-Saluki
n02091831_3846-0.jpg n02091831-Saluki
n02091831_4283-0.jpg n02091831-Saluki
n02091831_4644-0.jpg n02091831-Saluki
n02091831_3875-0.jpg n02091831-Saluki
n02091831_4119-0.jpg n02091831-Saluki
n02091831_4846-0.jpg n02091831-Saluki
n02091831_355-0.jpg n02091831-Saluki
n02091831_4087-0.jpg n02091831-Saluki
n02091831_3760-0.jpg n02091831-Saluki
n02091831_5123-0.jpg n02091831-Saluki
n02091831_4966-1.jpg n02091831-Saluki
n02091831_4966-0.jpg n02091831-Saluki
n02091831_5244-0.jpg n02091831-Saluki
n02091831_5384-0.jpg n02091831-Saluki
n02091831_509-0.jpg n02091831-Saluki

n02091831_5596-0.jpg n02091831-Saluki
n02091831_4980-0.jpg n02091831-Saluki
n02091831_5436-0.jpg n02091831-Saluki
n02091831_5369-0.jpg n02091831-Saluki
n02091831_5020-0.jpg n02091831-Saluki
n02091831_55-0.jpg n02091831-Saluki
n02091831_5482-0.jpg n02091831-Saluki
n02091831_5216-0.jpg n02091831-Saluki
n02091831_5654-0.jpg n02091831-Saluki
n02091831_5359-0.jpg n02091831-Saluki
n02091831_7237-0.jpg n02091831-Saluki
n02091831_7237-1.jpg n02091831-Saluki
n02091831_648-0.jpg n02091831-Saluki
n02091831_7051-0.jpg n02091831-Saluki
n02091831_7051-1.jpg n02091831-Saluki
n02091831_6323-0.jpg n02091831-Saluki
n02091831_573-0.jpg n02091831-Saluki
n02091831_699-0.jpg n02091831-Saluki
n02091831_7030-0.jpg n02091831-Saluki
n02091831_7030-1.jpg n02091831-Saluki
n02091831_6114-0.jpg n02091831-Saluki
n02091831_7066-0.jpg n02091831-Saluki
n02091831_6757-0.jpg n02091831-Saluki
n02091831_7244-0.jpg n02091831-Saluki
n02091831_7169-0.jpg n02091831-Saluki
n02091831_6427-0.jpg n02091831-Saluki
n02091831_5712-0.jpg n02091831-Saluki
n02091831_7287-0.jpg n02091831-Saluki
n02091831_5745-0.jpg n02091831-Saluki
n02091831_725-0.jpg n02091831-Saluki
n02091831_6406-1.jpg n02091831-Saluki
n02091831_6406-0.jpg n02091831-Saluki
n02091831_5879-0.jpg n02091831-Saluki
n02091831_5692-0.jpg n02091831-Saluki
n02091831_6451-0.jpg n02091831-Saluki
n02091831_6139-0.jpg n02091831-Saluki
n02091831_627-0.jpg n02091831-Saluki
n02091831_627-1.jpg n02091831-Saluki
n02091831_6582-0.jpg n02091831-Saluki
n02091831_566-0.jpg n02091831-Saluki
n02091831_6308-0.jpg n02091831-Saluki
n02091831_878-0.jpg n02091831-Saluki
n02091831_764-0.jpg n02091831-Saluki
n02091831_8223-0.jpg n02091831-Saluki
n02091831_801-0.jpg n02091831-Saluki
n02091831_8847-0.jpg n02091831-Saluki
n02091831_749-0.jpg n02091831-Saluki
n02091831_736-0.jpg n02091831-Saluki
n02091831_7497-0.jpg n02091831-Saluki
n02091831_8633-0.jpg n02091831-Saluki
n02091831_7895-0.jpg n02091831-Saluki
n02091831_8404-0.jpg n02091831-Saluki
n02091831_8843-0.jpg n02091831-Saluki
n02091831_7957-0.jpg n02091831-Saluki
n02091831_8028-0.jpg n02091831-Saluki
n02091831_8028-1.jpg n02091831-Saluki
n02091831_7846-0.jpg n02091831-Saluki
n02091831_8401-0.jpg n02091831-Saluki
n02091831_8401-1.jpg n02091831-Saluki
n02091831_8160-0.jpg n02091831-Saluki
n02091831_735-0.jpg n02091831-Saluki
n02091831_735-1.jpg n02091831-Saluki
n02091831_843-0.jpg n02091831-Saluki
n02091831_7769-0.jpg n02091831-Saluki
n02091831_7665-0.jpg n02091831-Saluki
n02091831_7665-1.jpg n02091831-Saluki
n02091831_7393-0.jpg n02091831-Saluki
n02091831_848-0.jpg n02091831-Saluki
n02091831_7977-0.jpg n02091831-Saluki
n02091831_9731-0.jpg n02091831-Saluki
n02091831_9731-1.jpg n02091831-Saluki
n02091831_9263-0.jpg n02091831-Saluki

n02091831_97-0.jpg n02091831-Saluki
n02091831_9856-0.jpg n02091831-Saluki
n02091831_956-0.jpg n02091831-Saluki
n02091831_961-0.jpg n02091831-Saluki
n02091831_9190-0.jpg n02091831-Saluki
n02091831_10576.jpg n02091831-Saluki
n02091831_10290.jpg n02091831-Saluki
n02091831_1036.jpg n02091831-Saluki
n02091831_10215.jpg n02091831-Saluki
n02091831_10733.jpg n02091831-Saluki
n02091831_10722.jpg n02091831-Saluki
n02091831_10639.jpg n02091831-Saluki
n02091831_10593.jpg n02091831-Saluki
n02091831_10803.jpg n02091831-Saluki
n02091831_12653.jpg n02091831-Saluki
n02091831_1565.jpg n02091831-Saluki
n02091831_11421.jpg n02091831-Saluki
n02091831_1110.jpg n02091831-Saluki
n02091831_13354.jpg n02091831-Saluki
n02091831_13361.jpg n02091831-Saluki
n02091831_151.jpg n02091831-Saluki
n02091831_1495.jpg n02091831-Saluki
n02091831_10823.jpg n02091831-Saluki
n02091831_13935.jpg n02091831-Saluki
n02091831_12881.jpg n02091831-Saluki
n02091831_11553.jpg n02091831-Saluki
n02091831_13566.jpg n02091831-Saluki
n02091831_1730.jpg n02091831-Saluki
n02091831_1696.jpg n02091831-Saluki
n02091831_11498.jpg n02091831-Saluki
n02091831_1182.jpg n02091831-Saluki
n02091831_12945.jpg n02091831-Saluki
n02091831_10822.jpg n02091831-Saluki
n02091831_1118.jpg n02091831-Saluki
n02091831_11177.jpg n02091831-Saluki
n02091831_13486.jpg n02091831-Saluki
n02091831_1400.jpg n02091831-Saluki
n02091831_1594.jpg n02091831-Saluki
n02091831_13767.jpg n02091831-Saluki
n02091831_13640.jpg n02091831-Saluki
n02091831_1563.jpg n02091831-Saluki
n02091831_1623.jpg n02091831-Saluki
n02091831_13774.jpg n02091831-Saluki
n02091831_13536.jpg n02091831-Saluki
n02091831_1387.jpg n02091831-Saluki
n02091831_1507.jpg n02091831-Saluki
n02091831_1512.jpg n02091831-Saluki
n02091831_13507.jpg n02091831-Saluki
n02091831_11224.jpg n02091831-Saluki
n02091831_10978.jpg n02091831-Saluki
n02091831_11021.jpg n02091831-Saluki
n02091831_1439.jpg n02091831-Saluki
n02091831_2245.jpg n02091831-Saluki
n02091831_2232.jpg n02091831-Saluki
n02091831_1801.jpg n02091831-Saluki
n02091831_2288.jpg n02091831-Saluki
n02091831_2779.jpg n02091831-Saluki
n02091831_2606.jpg n02091831-Saluki
n02091831_2391.jpg n02091831-Saluki
n02091831_2076.jpg n02091831-Saluki
n02091831_256.jpg n02091831-Saluki
n02091831_213.jpg n02091831-Saluki
n02091831_2290.jpg n02091831-Saluki
n02091831_1852.jpg n02091831-Saluki
n02091831_2344.jpg n02091831-Saluki
n02091831_2315.jpg n02091831-Saluki
n02091831_2362.jpg n02091831-Saluki
n02091831_2094.jpg n02091831-Saluki
n02091831_2338.jpg n02091831-Saluki
n02091831_2108.jpg n02091831-Saluki
n02091831_2638.jpg n02091831-Saluki
n02091831_2592.jpg n02091831-Saluki

n02091831_2586.jpg n02091831-Saluki
n02091831_2838.jpg n02091831-Saluki
n02091831_3061.jpg n02091831-Saluki
n02091831_2858.jpg n02091831-Saluki
n02091831_2962.jpg n02091831-Saluki
n02091831_3038.jpg n02091831-Saluki
n02091831_3334.jpg n02091831-Saluki
n02091831_346.jpg n02091831-Saluki
n02091831_3042.jpg n02091831-Saluki
n02091831_3433.jpg n02091831-Saluki
n02091831_3222.jpg n02091831-Saluki
n02091831_3430.jpg n02091831-Saluki
n02091831_2880.jpg n02091831-Saluki
n02091831_3064.jpg n02091831-Saluki
n02091831_3339.jpg n02091831-Saluki
n02091831_3067.jpg n02091831-Saluki
n02091831_3300.jpg n02091831-Saluki
n02091831_3152.jpg n02091831-Saluki
n02091831_3238.jpg n02091831-Saluki
n02091831_3310.jpg n02091831-Saluki
n02091831_3254.jpg n02091831-Saluki
n02091831_3400.jpg n02091831-Saluki
n02091831_2995.jpg n02091831-Saluki
n02091831_2911.jpg n02091831-Saluki
n02091831_3054.jpg n02091831-Saluki
n02091831_3180.jpg n02091831-Saluki
n02091831_351.jpg n02091831-Saluki
n02091831_3242.jpg n02091831-Saluki
n02091831_304.jpg n02091831-Saluki
n02091831_3108.jpg n02091831-Saluki
n02091831_3052.jpg n02091831-Saluki
n02091831_3643.jpg n02091831-Saluki
n02091831_4142.jpg n02091831-Saluki
n02091831_3899.jpg n02091831-Saluki
n02091831_3616.jpg n02091831-Saluki
n02091831_38.jpg n02091831-Saluki
n02091831_3594.jpg n02091831-Saluki
n02091831_3797.jpg n02091831-Saluki
n02091831_4057.jpg n02091831-Saluki
n02091831_4246.jpg n02091831-Saluki
n02091831_4667.jpg n02091831-Saluki
n02091831_4259.jpg n02091831-Saluki
n02091831_4626.jpg n02091831-Saluki
n02091831_4463.jpg n02091831-Saluki
n02091831_3909.jpg n02091831-Saluki
n02091831_4755.jpg n02091831-Saluki
n02091831_410.jpg n02091831-Saluki
n02091831_3847.jpg n02091831-Saluki
n02091831_3962.jpg n02091831-Saluki
n02091831_3675.jpg n02091831-Saluki
n02091831_4030.jpg n02091831-Saluki
n02091831_4487.jpg n02091831-Saluki
n02091831_3846.jpg n02091831-Saluki
n02091831_3875.jpg n02091831-Saluki
n02091831_4644.jpg n02091831-Saluki
n02091831_4283.jpg n02091831-Saluki
n02091831_4119.jpg n02091831-Saluki
n02091831_4846.jpg n02091831-Saluki
n02091831_355.jpg n02091831-Saluki
n02091831_3760.jpg n02091831-Saluki
n02091831_4087.jpg n02091831-Saluki
n02091831_5123.jpg n02091831-Saluki
n02091831_4966.jpg n02091831-Saluki
n02091831_5244.jpg n02091831-Saluki
n02091831_5384.jpg n02091831-Saluki
n02091831_509.jpg n02091831-Saluki
n02091831_5596.jpg n02091831-Saluki
n02091831_4980.jpg n02091831-Saluki
n02091831_5436.jpg n02091831-Saluki
n02091831_5369.jpg n02091831-Saluki
n02091831_5020.jpg n02091831-Saluki
n02091831_5482.jpg n02091831-Saluki

n02091831_55.jpg n02091831-Saluki
n02091831_5216.jpg n02091831-Saluki
n02091831_5654.jpg n02091831-Saluki
n02091831_5359.jpg n02091831-Saluki
n02091831_7237.jpg n02091831-Saluki
n02091831_648.jpg n02091831-Saluki
n02091831_7051.jpg n02091831-Saluki
n02091831_6323.jpg n02091831-Saluki
n02091831_573.jpg n02091831-Saluki
n02091831_699.jpg n02091831-Saluki
n02091831_7030.jpg n02091831-Saluki
n02091831_6114.jpg n02091831-Saluki
n02091831_7066.jpg n02091831-Saluki
n02091831_6757.jpg n02091831-Saluki
n02091831_7244.jpg n02091831-Saluki
n02091831_7169.jpg n02091831-Saluki
n02091831_6427.jpg n02091831-Saluki
n02091831_5712.jpg n02091831-Saluki
n02091831_7287.jpg n02091831-Saluki
n02091831_5745.jpg n02091831-Saluki
n02091831_725.jpg n02091831-Saluki
n02091831_5879.jpg n02091831-Saluki
n02091831_6406.jpg n02091831-Saluki
n02091831_6451.jpg n02091831-Saluki
n02091831_5692.jpg n02091831-Saluki
n02091831_6139.jpg n02091831-Saluki
n02091831_627.jpg n02091831-Saluki
n02091831_6582.jpg n02091831-Saluki
n02091831_566.jpg n02091831-Saluki
n02091831_6308.jpg n02091831-Saluki
n02091831_878.jpg n02091831-Saluki
n02091831_764.jpg n02091831-Saluki
n02091831_8223.jpg n02091831-Saluki
n02091831_801.jpg n02091831-Saluki
n02091831_8847.jpg n02091831-Saluki
n02091831_749.jpg n02091831-Saluki
n02091831_736.jpg n02091831-Saluki
n02091831_7497.jpg n02091831-Saluki
n02091831_8633.jpg n02091831-Saluki
n02091831_8843.jpg n02091831-Saluki
n02091831_8404.jpg n02091831-Saluki
n02091831_7895.jpg n02091831-Saluki
n02091831_7957.jpg n02091831-Saluki
n02091831_8028.jpg n02091831-Saluki
n02091831_7846.jpg n02091831-Saluki
n02091831_8401.jpg n02091831-Saluki
n02091831_8160.jpg n02091831-Saluki
n02091831_735.jpg n02091831-Saluki
n02091831_843.jpg n02091831-Saluki
n02091831_7769.jpg n02091831-Saluki
n02091831_7665.jpg n02091831-Saluki
n02091831_7393.jpg n02091831-Saluki
n02091831_848.jpg n02091831-Saluki
n02091831_7977.jpg n02091831-Saluki
n02091831_9731.jpg n02091831-Saluki
n02091831_9263.jpg n02091831-Saluki
n02091831_97.jpg n02091831-Saluki
n02091831_9856.jpg n02091831-Saluki
n02091831_956.jpg n02091831-Saluki
n02091831_961.jpg n02091831-Saluki
n02091831_9190.jpg n02091831-Saluki
n02095314_1268-0.jpg n02091831-Saluki
n02095314_1054-0.jpg n02091831-Saluki
n02095314_1100-0.jpg n02091831-Saluki
n02095314_1033-0.jpg n02091831-Saluki
n02095314_1104-0.jpg n02091831-Saluki
n02095314_1116-0.jpg n02091831-Saluki
n02095314_108-0.jpg n02091831-Saluki
n02095314_105-0.jpg n02091831-Saluki
n02095314_1212-0.jpg n02091831-Saluki
n02095314_1043-0.jpg n02091831-Saluki
n02095314_1278-0.jpg n02091831-Saluki

n02095314_1177-0.jpg n02091831-Saluki
n02095314_1080-0.jpg n02091831-Saluki
n02095314_1884-0.jpg n02091831-Saluki
n02095314_1820-0.jpg n02091831-Saluki
n02095314_1772-0.jpg n02091831-Saluki
n02095314_1672-0.jpg n02091831-Saluki
n02095314_1866-0.jpg n02091831-Saluki
n02095314_138-0.jpg n02091831-Saluki
n02095314_188-0.jpg n02091831-Saluki
n02095314_1814-0.jpg n02091831-Saluki
n02095314_1577-0.jpg n02091831-Saluki
n02095314_1582-0.jpg n02091831-Saluki
n02095314_1829-0.jpg n02091831-Saluki
n02095314_1789-0.jpg n02091831-Saluki
n02095314_1533-0.jpg n02091831-Saluki
n02095314_1505-0.jpg n02091831-Saluki
n02095314_157-0.jpg n02091831-Saluki
n02095314_1536-0.jpg n02091831-Saluki
n02095314_1583-0.jpg n02091831-Saluki
n02095314_1782-0.jpg n02091831-Saluki
n02095314_1705-0.jpg n02091831-Saluki
n02095314_1835-0.jpg n02091831-Saluki
n02095314_1660-0.jpg n02091831-Saluki
n02095314_1407-0.jpg n02091831-Saluki
n02095314_1282-0.jpg n02091831-Saluki
n02095314_1717-0.jpg n02091831-Saluki
n02095314_1665-0.jpg n02091831-Saluki
n02095314_1754-0.jpg n02091831-Saluki
n02095314_1395-0.jpg n02091831-Saluki
n02095314_1704-0.jpg n02091831-Saluki
n02095314_1780-0.jpg n02091831-Saluki
n02095314_227-0.jpg n02091831-Saluki
n02095314_2162-0.jpg n02091831-Saluki
n02095314_2130-0.jpg n02091831-Saluki
n02095314_2196-0.jpg n02091831-Saluki
n02095314_2196-1.jpg n02091831-Saluki
n02095314_2314-0.jpg n02091831-Saluki
n02095314_2308-0.jpg n02091831-Saluki
n02095314_2310-0.jpg n02091831-Saluki
n02095314_2230-0.jpg n02091831-Saluki
n02095314_2424-0.jpg n02091831-Saluki
n02095314_1969-0.jpg n02091831-Saluki
n02095314_1917-0.jpg n02091831-Saluki
n02095314_1945-0.jpg n02091831-Saluki
n02095314_2372-0.jpg n02091831-Saluki
n02095314_2059-0.jpg n02091831-Saluki
n02095314_1974-0.jpg n02091831-Saluki
n02095314_2338-0.jpg n02091831-Saluki
n02095314_2-0.jpg n02091831-Saluki
n02095314_1976-0.jpg n02091831-Saluki
n02095314_2038-0.jpg n02091831-Saluki
n02095314_2198-1.jpg n02091831-Saluki
n02095314_2198-0.jpg n02091831-Saluki
n02095314_2139-0.jpg n02091831-Saluki
n02095314_2139-1.jpg n02091831-Saluki
n02095314_2139-2.jpg n02091831-Saluki
n02095314_2472-0.jpg n02091831-Saluki
n02095314_2460-0.jpg n02091831-Saluki
n02095314_1997-0.jpg n02091831-Saluki
n02095314_2205-0.jpg n02091831-Saluki
n02095314_2354-0.jpg n02091831-Saluki
n02095314_1894-0.jpg n02091831-Saluki
n02095314_2421-0.jpg n02091831-Saluki
n02095314_2256-0.jpg n02091831-Saluki
n02095314_2256-1.jpg n02091831-Saluki
n02095314_3039-0.jpg n02091831-Saluki
n02095314_2247-0.jpg n02091831-Saluki
n02095314_2890-0.jpg n02091831-Saluki
n02095314_2964-0.jpg n02091831-Saluki
n02095314_2742-0.jpg n02091831-Saluki
n02095314_2754-0.jpg n02091831-Saluki
n02095314_261-0.jpg n02091831-Saluki

n02095314_2803-0.jpg n02091831-Saluki
n02095314_2699-0.jpg n02091831-Saluki
n02095314_2841-0.jpg n02091831-Saluki
n02095314_3006-0.jpg n02091831-Saluki
n02095314_2664-0.jpg n02091831-Saluki
n02095314_2609-0.jpg n02091831-Saluki
n02095314_252-0.jpg n02091831-Saluki
n02095314_2519-0.jpg n02091831-Saluki
n02095314_2827-0.jpg n02091831-Saluki
n02095314_2864-0.jpg n02091831-Saluki
n02095314_2687-0.jpg n02091831-Saluki
n02095314_2876-0.jpg n02091831-Saluki
n02095314_2683-0.jpg n02091831-Saluki
n02095314_289-0.jpg n02091831-Saluki
n02095314_2904-0.jpg n02091831-Saluki
n02095314_2932-0.jpg n02091831-Saluki
n02095314_2863-0.jpg n02091831-Saluki
n02095314_2564-0.jpg n02091831-Saluki
n02095314_293-0.jpg n02091831-Saluki
n02095314_3052-0.jpg n02091831-Saluki
n02095314_3321-0.jpg n02091831-Saluki
n02095314_3316-0.jpg n02091831-Saluki
n02095314_367-0.jpg n02091831-Saluki
n02095314_448-0.jpg n02091831-Saluki
n02095314_3189-0.jpg n02091831-Saluki
n02095314_3242-0.jpg n02091831-Saluki
n02095314_3185-0.jpg n02091831-Saluki
n02095314_3495-0.jpg n02091831-Saluki
n02095314_3299-0.jpg n02091831-Saluki
n02095314_3472-0.jpg n02091831-Saluki
n02095314_3364-0.jpg n02091831-Saluki
n02095314_3509-0.jpg n02091831-Saluki
n02095314_464-0.jpg n02091831-Saluki
n02095314_318-0.jpg n02091831-Saluki
n02095314_3295-0.jpg n02091831-Saluki
n02095314_401-0.jpg n02091831-Saluki
n02095314_3343-0.jpg n02091831-Saluki
n02095314_3166-0.jpg n02091831-Saluki
n02095314_3246-0.jpg n02091831-Saluki
n02095314_3084-0.jpg n02091831-Saluki
n02095314_3451-0.jpg n02091831-Saluki
n02095314_3240-0.jpg n02091831-Saluki
n02095314_3483-0.jpg n02091831-Saluki
n02095314_3395-0.jpg n02091831-Saluki
n02095314_3153-0.jpg n02091831-Saluki
n02095314_3054-0.jpg n02091831-Saluki
n02095314_398-1.jpg n02091831-Saluki
n02095314_398-0.jpg n02091831-Saluki
n02095314_3512-0.jpg n02091831-Saluki
n02095314_3372-0.jpg n02091831-Saluki
n02095314_397-0.jpg n02091831-Saluki
n02095314_3217-0.jpg n02091831-Saluki
n02095314_3527-0.jpg n02091831-Saluki
n02095314_3227-0.jpg n02091831-Saluki
n02095314_3091-0.jpg n02091831-Saluki
n02095314_493-0.jpg n02091831-Saluki
n02095314_504-0.jpg n02091831-Saluki
n02095314_550-0.jpg n02091831-Saluki
n02095314_691-0.jpg n02091831-Saluki
n02095314_613-0.jpg n02091831-Saluki
n02095314_481-0.jpg n02091831-Saluki
n02095314_80-0.jpg n02091831-Saluki
n02095314_725-0.jpg n02091831-Saluki
n02095314_792-0.jpg n02091831-Saluki
n02095314_591-1.jpg n02091831-Saluki
n02095314_591-0.jpg n02091831-Saluki
n02095314_594-0.jpg n02091831-Saluki
n02095314_777-0.jpg n02091831-Saluki
n02095314_651-0.jpg n02091831-Saluki
n02095314_662-0.jpg n02091831-Saluki
n02095314_669-0.jpg n02091831-Saluki
n02095314_663-0.jpg n02091831-Saluki

n02095314_740-0.jpg n02091831-Saluki
n02095314_942-1.jpg n02091831-Saluki
n02095314_547-0.jpg n02091831-Saluki
n02095314_942-0.jpg n02091831-Saluki
n02095314_807-0.jpg n02091831-Saluki
n02095314_928-1.jpg n02091831-Saluki
n02095314_928-0.jpg n02091831-Saluki
n02095314_956-0.jpg n02091831-Saluki
n02095314_996-0.jpg n02091831-Saluki
n02095314_969-0.jpg n02091831-Saluki
n02095314_963-0.jpg n02091831-Saluki
n02095314_1268.jpg n02091831-Saluki
n02095314_1054.jpg n02091831-Saluki
n02095314_1100.jpg n02091831-Saluki
n02095314_1033.jpg n02091831-Saluki
n02095314_1104.jpg n02091831-Saluki
n02095314_1116.jpg n02091831-Saluki
n02095314_108.jpg n02091831-Saluki
n02095314_105.jpg n02091831-Saluki
n02095314_1212.jpg n02091831-Saluki
n02095314_1043.jpg n02091831-Saluki
n02095314_1177.jpg n02091831-Saluki
n02095314_1278.jpg n02091831-Saluki
n02095314_1080.jpg n02091831-Saluki
n02095314_1884.jpg n02091831-Saluki
n02095314_1820.jpg n02091831-Saluki
n02095314_1772.jpg n02091831-Saluki
n02095314_1672.jpg n02091831-Saluki
n02095314_1866.jpg n02091831-Saluki
n02095314_138.jpg n02091831-Saluki
n02095314_188.jpg n02091831-Saluki
n02095314_1814.jpg n02091831-Saluki
n02095314_1577.jpg n02091831-Saluki
n02095314_1582.jpg n02091831-Saluki
n02095314_1829.jpg n02091831-Saluki
n02095314_1789.jpg n02091831-Saluki
n02095314_1533.jpg n02091831-Saluki
n02095314_1505.jpg n02091831-Saluki
n02095314_157.jpg n02091831-Saluki
n02095314_1536.jpg n02091831-Saluki
n02095314_1583.jpg n02091831-Saluki
n02095314_1782.jpg n02091831-Saluki
n02095314_1705.jpg n02091831-Saluki
n02095314_1835.jpg n02091831-Saluki
n02095314_1660.jpg n02091831-Saluki
n02095314_1407.jpg n02091831-Saluki
n02095314_1282.jpg n02091831-Saluki
n02095314_1717.jpg n02091831-Saluki
n02095314_1665.jpg n02091831-Saluki
n02095314_1754.jpg n02091831-Saluki
n02095314_1395.jpg n02091831-Saluki
n02095314_1704.jpg n02091831-Saluki
n02095314_1780.jpg n02091831-Saluki
n02095314_227.jpg n02091831-Saluki
n02095314_2162.jpg n02091831-Saluki
n02095314_2130.jpg n02091831-Saluki
n02095314_2314.jpg n02091831-Saluki
n02095314_2196.jpg n02091831-Saluki
n02095314_2308.jpg n02091831-Saluki
n02095314_2310.jpg n02091831-Saluki
n02095314_2230.jpg n02091831-Saluki
n02095314_2424.jpg n02091831-Saluki
n02095314_1969.jpg n02091831-Saluki
n02095314_1917.jpg n02091831-Saluki
n02095314_1945.jpg n02091831-Saluki
n02095314_2372.jpg n02091831-Saluki
n02095314_2059.jpg n02091831-Saluki
n02095314_1974.jpg n02091831-Saluki
n02095314_2338.jpg n02091831-Saluki
n02095314_2.jpg n02091831-Saluki
n02095314_1976.jpg n02091831-Saluki
n02095314_2038.jpg n02091831-Saluki

n02095314_2198.jpg n02091831-Saluki
n02095314_2139.jpg n02091831-Saluki
n02095314_2472.jpg n02091831-Saluki
n02095314_2460.jpg n02091831-Saluki
n02095314_1997.jpg n02091831-Saluki
n02095314_2205.jpg n02091831-Saluki
n02095314_2354.jpg n02091831-Saluki
n02095314_1894.jpg n02091831-Saluki
n02095314_2421.jpg n02091831-Saluki
n02095314_2256.jpg n02091831-Saluki
n02095314_2247.jpg n02091831-Saluki
n02095314_3039.jpg n02091831-Saluki
n02095314_2890.jpg n02091831-Saluki
n02095314_2964.jpg n02091831-Saluki
n02095314_2742.jpg n02091831-Saluki
n02095314_261.jpg n02091831-Saluki
n02095314_2754.jpg n02091831-Saluki
n02095314_2803.jpg n02091831-Saluki
n02095314_2699.jpg n02091831-Saluki
n02095314_2841.jpg n02091831-Saluki
n02095314_3006.jpg n02091831-Saluki
n02095314_2664.jpg n02091831-Saluki
n02095314_2609.jpg n02091831-Saluki
n02095314_252.jpg n02091831-Saluki
n02095314_2519.jpg n02091831-Saluki
n02095314_2864.jpg n02091831-Saluki
n02095314_2827.jpg n02091831-Saluki
n02095314_2687.jpg n02091831-Saluki
n02095314_2876.jpg n02091831-Saluki
n02095314_2683.jpg n02091831-Saluki
n02095314_2904.jpg n02091831-Saluki
n02095314_289.jpg n02091831-Saluki
n02095314_2932.jpg n02091831-Saluki
n02095314_2863.jpg n02091831-Saluki
n02095314_2564.jpg n02091831-Saluki
n02095314_3052.jpg n02091831-Saluki
n02095314_293.jpg n02091831-Saluki
n02095314_3321.jpg n02091831-Saluki
n02095314_3316.jpg n02091831-Saluki
n02095314_367.jpg n02091831-Saluki
n02095314_448.jpg n02091831-Saluki
n02095314_3189.jpg n02091831-Saluki
n02095314_3242.jpg n02091831-Saluki
n02095314_3185.jpg n02091831-Saluki
n02095314_3495.jpg n02091831-Saluki
n02095314_3299.jpg n02091831-Saluki
n02095314_3472.jpg n02091831-Saluki
n02095314_3364.jpg n02091831-Saluki
n02095314_3509.jpg n02091831-Saluki
n02095314_464.jpg n02091831-Saluki
n02095314_318.jpg n02091831-Saluki
n02095314_3295.jpg n02091831-Saluki
n02095314_401.jpg n02091831-Saluki
n02095314_3343.jpg n02091831-Saluki
n02095314_3166.jpg n02091831-Saluki
n02095314_3246.jpg n02091831-Saluki
n02095314_3084.jpg n02091831-Saluki
n02095314_3451.jpg n02091831-Saluki
n02095314_3240.jpg n02091831-Saluki
n02095314_3395.jpg n02091831-Saluki
n02095314_3483.jpg n02091831-Saluki
n02095314_3054.jpg n02091831-Saluki
n02095314_3153.jpg n02091831-Saluki
n02095314_398.jpg n02091831-Saluki
n02095314_3512.jpg n02091831-Saluki
n02095314_3372.jpg n02091831-Saluki
n02095314_3217.jpg n02091831-Saluki
n02095314_397.jpg n02091831-Saluki
n02095314_3527.jpg n02091831-Saluki
n02095314_3227.jpg n02091831-Saluki
n02095314_3091.jpg n02091831-Saluki
n02095314_504.jpg n02091831-Saluki

n02095314_493.jpg n02091831-Saluki
n02095314_550.jpg n02091831-Saluki
n02095314_691.jpg n02091831-Saluki
n02095314_613.jpg n02091831-Saluki
n02095314_481.jpg n02091831-Saluki
n02095314_80.jpg n02091831-Saluki
n02095314_792.jpg n02091831-Saluki
n02095314_725.jpg n02091831-Saluki
n02095314_591.jpg n02091831-Saluki
n02095314_594.jpg n02091831-Saluki
n02095314_777.jpg n02091831-Saluki
n02095314_662.jpg n02091831-Saluki
n02095314_651.jpg n02091831-Saluki
n02095314_669.jpg n02091831-Saluki
n02095314_663.jpg n02091831-Saluki
n02095314_740.jpg n02091831-Saluki
n02095314_547.jpg n02091831-Saluki
n02095314_942.jpg n02091831-Saluki
n02095314_807.jpg n02091831-Saluki
n02095314_928.jpg n02091831-Saluki
n02095314_956.jpg n02091831-Saluki
n02095314_996.jpg n02091831-Saluki
n02095314_969.jpg n02091831-Saluki
n02095314_963.jpg n02091831-Saluki
n02092002_10911-0.jpg n02092002-Scottish_deerhound
n02092002_11088-0.jpg n02092002-Scottish_deerhound
n02092002_1029-0.jpg n02092002-Scottish_deerhound
n02092002_109-0.jpg n02092002-Scottish_deerhound
n02092002_1130-0.jpg n02092002-Scottish_deerhound
n02092002_10693-0.jpg n02092002-Scottish_deerhound
n02092002_11390-0.jpg n02092002-Scottish_deerhound
n02092002_1147-0.jpg n02092002-Scottish_deerhound
n02092002_11131-0.jpg n02092002-Scottish_deerhound
n02092002_11428-0.jpg n02092002-Scottish_deerhound
n02092002_1086-1.jpg n02092002-Scottish_deerhound
n02092002_1086-0.jpg n02092002-Scottish_deerhound
n02092002_11087-0.jpg n02092002-Scottish_deerhound
n02092002_10699-0.jpg n02092002-Scottish_deerhound
n02092002_11459-0.jpg n02092002-Scottish_deerhound
n02092002_11105-0.jpg n02092002-Scottish_deerhound
n02092002_11245-0.jpg n02092002-Scottish_deerhound
n02092002_11105-1.jpg n02092002-Scottish_deerhound
n02092002_10060-0.jpg n02092002-Scottish_deerhound
n02092002_13372-0.jpg n02092002-Scottish_deerhound
n02092002_14369-0.jpg n02092002-Scottish_deerhound
n02092002_15064-0.jpg n02092002-Scottish_deerhound
n02092002_15064-1.jpg n02092002-Scottish_deerhound
n02092002_1253-0.jpg n02092002-Scottish_deerhound
n02092002_12394-0.jpg n02092002-Scottish_deerhound
n02092002_12977-0.jpg n02092002-Scottish_deerhound
n02092002_14825-0.jpg n02092002-Scottish_deerhound
n02092002_13159-0.jpg n02092002-Scottish_deerhound
n02092002_1200-0.jpg n02092002-Scottish_deerhound
n02092002_14540-0.jpg n02092002-Scottish_deerhound
n02092002_1242-0.jpg n02092002-Scottish_deerhound
n02092002_120-0.jpg n02092002-Scottish_deerhound
n02092002_12595-0.jpg n02092002-Scottish_deerhound
n02092002_12544-0.jpg n02092002-Scottish_deerhound
n02092002_1339-0.jpg n02092002-Scottish_deerhound
n02092002_12828-0.jpg n02092002-Scottish_deerhound
n02092002_12414-0.jpg n02092002-Scottish_deerhound
n02092002_15096-0.jpg n02092002-Scottish_deerhound
n02092002_14102-0.jpg n02092002-Scottish_deerhound
n02092002_1439-0.jpg n02092002-Scottish_deerhound
n02092002_14771-0.jpg n02092002-Scottish_deerhound
n02092002_14567-0.jpg n02092002-Scottish_deerhound
n02092002_149-0.jpg n02092002-Scottish_deerhound
n02092002_13380-0.jpg n02092002-Scottish_deerhound
n02092002_14858-0.jpg n02092002-Scottish_deerhound
n02092002_1170-0.jpg n02092002-Scottish_deerhound
n02092002_14315-0.jpg n02092002-Scottish_deerhound
n02092002_14917-0.jpg n02092002-Scottish_deerhound

n02092002_1438-0.jpg n02092002-Scottish_deerhound
n02092002_1153-0.jpg n02092002-Scottish_deerhound
n02092002_15010-0.jpg n02092002-Scottish_deerhound
n02092002_1451-0.jpg n02092002-Scottish_deerhound
n02092002_13565-0.jpg n02092002-Scottish_deerhound
n02092002_1962-0.jpg n02092002-Scottish_deerhound
n02092002_2269-0.jpg n02092002-Scottish_deerhound
n02092002_15198-0.jpg n02092002-Scottish_deerhound
n02092002_2184-0.jpg n02092002-Scottish_deerhound
n02092002_1551-0.jpg n02092002-Scottish_deerhound
n02092002_1551-1.jpg n02092002-Scottish_deerhound
n02092002_15354-0.jpg n02092002-Scottish_deerhound
n02092002_1608-0.jpg n02092002-Scottish_deerhound
n02092002_1698-0.jpg n02092002-Scottish_deerhound
n02092002_15215-0.jpg n02092002-Scottish_deerhound
n02092002_1730-0.jpg n02092002-Scottish_deerhound
n02092002_1693-0.jpg n02092002-Scottish_deerhound
n02092002_1601-0.jpg n02092002-Scottish_deerhound
n02092002_2217-0.jpg n02092002-Scottish_deerhound
n02092002_1646-0.jpg n02092002-Scottish_deerhound
n02092002_1564-0.jpg n02092002-Scottish_deerhound
n02092002_2097-0.jpg n02092002-Scottish_deerhound
n02092002_1828-0.jpg n02092002-Scottish_deerhound
n02092002_2008-0.jpg n02092002-Scottish_deerhound
n02092002_1592-0.jpg n02092002-Scottish_deerhound
n02092002_2257-0.jpg n02092002-Scottish_deerhound
n02092002_198-0.jpg n02092002-Scottish_deerhound
n02092002_1767-0.jpg n02092002-Scottish_deerhound
n02092002_15165-0.jpg n02092002-Scottish_deerhound
n02092002_15342-0.jpg n02092002-Scottish_deerhound
n02092002_15112-0.jpg n02092002-Scottish_deerhound
n02092002_2129-0.jpg n02092002-Scottish_deerhound
n02092002_1890-0.jpg n02092002-Scottish_deerhound
n02092002_1937-0.jpg n02092002-Scottish_deerhound
n02092002_1937-1.jpg n02092002-Scottish_deerhound
n02092002_1583-0.jpg n02092002-Scottish_deerhound
n02092002_1727-0.jpg n02092002-Scottish_deerhound
n02092002_3460-0.jpg n02092002-Scottish_deerhound
n02092002_3867-0.jpg n02092002-Scottish_deerhound
n02092002_3500-0.jpg n02092002-Scottish_deerhound
n02092002_296-0.jpg n02092002-Scottish_deerhound
n02092002_3301-0.jpg n02092002-Scottish_deerhound
n02092002_2859-0.jpg n02092002-Scottish_deerhound
n02092002_3314-0.jpg n02092002-Scottish_deerhound
n02092002_2372-0.jpg n02092002-Scottish_deerhound
n02092002_2311-0.jpg n02092002-Scottish_deerhound
n02092002_3343-0.jpg n02092002-Scottish_deerhound
n02092002_2448-0.jpg n02092002-Scottish_deerhound
n02092002_3968-0.jpg n02092002-Scottish_deerhound
n02092002_2666-0.jpg n02092002-Scottish_deerhound
n02092002_3-0.jpg n02092002-Scottish_deerhound
n02092002_3856-0.jpg n02092002-Scottish_deerhound
n02092002_348-0.jpg n02092002-Scottish_deerhound
n02092002_2558-0.jpg n02092002-Scottish_deerhound
n02092002_3485-0.jpg n02092002-Scottish_deerhound
n02092002_2590-0.jpg n02092002-Scottish_deerhound
n02092002_2851-0.jpg n02092002-Scottish_deerhound
n02092002_305-0.jpg n02092002-Scottish_deerhound
n02092002_3494-0.jpg n02092002-Scottish_deerhound
n02092002_3271-0.jpg n02092002-Scottish_deerhound
n02092002_2294-0.jpg n02092002-Scottish_deerhound
n02092002_293-0.jpg n02092002-Scottish_deerhound
n02092002_228-0.jpg n02092002-Scottish_deerhound
n02092002_3400-0.jpg n02092002-Scottish_deerhound
n02092002_2981-0.jpg n02092002-Scottish_deerhound
n02092002_3861-0.jpg n02092002-Scottish_deerhound
n02092002_2723-0.jpg n02092002-Scottish_deerhound
n02092002_4220-0.jpg n02092002-Scottish_deerhound
n02092002_4338-0.jpg n02092002-Scottish_deerhound
n02092002_5202-0.jpg n02092002-Scottish_deerhound
n02092002_4555-0.jpg n02092002-Scottish_deerhound
n02092002_498-0.jpg n02092002-Scottish_deerhound

n02092002_14369.jpg n02092002-Scottish_deerhound
n02092002_15064.jpg n02092002-Scottish_deerhound
n02092002_1253.jpg n02092002-Scottish_deerhound
n02092002_12394.jpg n02092002-Scottish_deerhound
n02092002_12977.jpg n02092002-Scottish_deerhound
n02092002_14825.jpg n02092002-Scottish_deerhound
n02092002_13159.jpg n02092002-Scottish_deerhound
n02092002_1200.jpg n02092002-Scottish_deerhound
n02092002_14540.jpg n02092002-Scottish_deerhound
n02092002_1242.jpg n02092002-Scottish_deerhound
n02092002_120.jpg n02092002-Scottish_deerhound
n02092002_12595.jpg n02092002-Scottish_deerhound
n02092002_12544.jpg n02092002-Scottish_deerhound
n02092002_1339.jpg n02092002-Scottish_deerhound
n02092002_12828.jpg n02092002-Scottish_deerhound
n02092002_15096.jpg n02092002-Scottish_deerhound
n02092002_12414.jpg n02092002-Scottish_deerhound
n02092002_14102.jpg n02092002-Scottish_deerhound
n02092002_1439.jpg n02092002-Scottish_deerhound
n02092002_14771.jpg n02092002-Scottish_deerhound
n02092002_14567.jpg n02092002-Scottish_deerhound
n02092002_149.jpg n02092002-Scottish_deerhound
n02092002_13380.jpg n02092002-Scottish_deerhound
n02092002_14858.jpg n02092002-Scottish_deerhound
n02092002_1170.jpg n02092002-Scottish_deerhound
n02092002_14315.jpg n02092002-Scottish_deerhound
n02092002_14917.jpg n02092002-Scottish_deerhound
n02092002_1438.jpg n02092002-Scottish_deerhound
n02092002_1153.jpg n02092002-Scottish_deerhound
n02092002_15010.jpg n02092002-Scottish_deerhound
n02092002_1451.jpg n02092002-Scottish_deerhound
n02092002_13565.jpg n02092002-Scottish_deerhound
n02092002_1962.jpg n02092002-Scottish_deerhound
n02092002_15198.jpg n02092002-Scottish_deerhound
n02092002_2269.jpg n02092002-Scottish_deerhound
n02092002_2184.jpg n02092002-Scottish_deerhound
n02092002_1551.jpg n02092002-Scottish_deerhound
n02092002_15354.jpg n02092002-Scottish_deerhound
n02092002_1608.jpg n02092002-Scottish_deerhound
n02092002_1698.jpg n02092002-Scottish_deerhound
n02092002_1730.jpg n02092002-Scottish_deerhound
n02092002_15215.jpg n02092002-Scottish_deerhound
n02092002_1693.jpg n02092002-Scottish_deerhound
n02092002_2217.jpg n02092002-Scottish_deerhound
n02092002_1601.jpg n02092002-Scottish_deerhound
n02092002_1646.jpg n02092002-Scottish_deerhound
n02092002_1564.jpg n02092002-Scottish_deerhound
n02092002_2097.jpg n02092002-Scottish_deerhound
n02092002_1828.jpg n02092002-Scottish_deerhound
n02092002_2008.jpg n02092002-Scottish_deerhound
n02092002_1592.jpg n02092002-Scottish_deerhound
n02092002_2257.jpg n02092002-Scottish_deerhound
n02092002_198.jpg n02092002-Scottish_deerhound
n02092002_1767.jpg n02092002-Scottish_deerhound
n02092002_15165.jpg n02092002-Scottish_deerhound
n02092002_15342.jpg n02092002-Scottish_deerhound
n02092002_15112.jpg n02092002-Scottish_deerhound
n02092002_2129.jpg n02092002-Scottish_deerhound
n02092002_1890.jpg n02092002-Scottish_deerhound
n02092002_1937.jpg n02092002-Scottish_deerhound
n02092002_1583.jpg n02092002-Scottish_deerhound
n02092002_1727.jpg n02092002-Scottish_deerhound
n02092002_3460.jpg n02092002-Scottish_deerhound
n02092002_3867.jpg n02092002-Scottish_deerhound
n02092002_3500.jpg n02092002-Scottish_deerhound
n02092002_296.jpg n02092002-Scottish_deerhound
n02092002_3301.jpg n02092002-Scottish_deerhound
n02092002_2859.jpg n02092002-Scottish_deerhound
n02092002_3314.jpg n02092002-Scottish_deerhound
n02092002_2372.jpg n02092002-Scottish_deerhound
n02092002_2311.jpg n02092002-Scottish_deerhound
n02092002_3343.jpg n02092002-Scottish_deerhound

n02092002_662.jpg n02092002-Scottish_deerhound
n02092002_6503.jpg n02092002-Scottish_deerhound
n02092002_6003.jpg n02092002-Scottish_deerhound
n02092002_6114.jpg n02092002-Scottish_deerhound
n02092002_6226.jpg n02092002-Scottish_deerhound
n02092002_6041.jpg n02092002-Scottish_deerhound
n02092002_6585.jpg n02092002-Scottish_deerhound
n02092002_6380.jpg n02092002-Scottish_deerhound
n02092002_6180.jpg n02092002-Scottish_deerhound
n02092002_6339.jpg n02092002-Scottish_deerhound
n02092002_6574.jpg n02092002-Scottish_deerhound
n02092002_6302.jpg n02092002-Scottish_deerhound
n02092002_6618.jpg n02092002-Scottish_deerhound
n02092002_6040.jpg n02092002-Scottish_deerhound
n02092002_7539.jpg n02092002-Scottish_deerhound
n02092002_6963.jpg n02092002-Scottish_deerhound
n02092002_6735.jpg n02092002-Scottish_deerhound
n02092002_7160.jpg n02092002-Scottish_deerhound
n02092002_6953.jpg n02092002-Scottish_deerhound
n02092002_7206.jpg n02092002-Scottish_deerhound
n02092002_7172.jpg n02092002-Scottish_deerhound
n02092002_6698.jpg n02092002-Scottish_deerhound
n02092002_692.jpg n02092002-Scottish_deerhound
n02092002_6695.jpg n02092002-Scottish_deerhound
n02092002_6702.jpg n02092002-Scottish_deerhound
n02092002_6780.jpg n02092002-Scottish_deerhound
n02092002_7099.jpg n02092002-Scottish_deerhound
n02092002_7181.jpg n02092002-Scottish_deerhound
n02092002_7473.jpg n02092002-Scottish_deerhound
n02092002_6915.jpg n02092002-Scottish_deerhound
n02092002_6907.jpg n02092002-Scottish_deerhound
n02092002_7314.jpg n02092002-Scottish_deerhound
n02092002_6625.jpg n02092002-Scottish_deerhound
n02092002_7268.jpg n02092002-Scottish_deerhound
n02092002_6621.jpg n02092002-Scottish_deerhound
n02092002_6827.jpg n02092002-Scottish_deerhound
n02092002_7165.jpg n02092002-Scottish_deerhound
n02092002_7537.jpg n02092002-Scottish_deerhound
n02092002_6895.jpg n02092002-Scottish_deerhound
n02092002_759.jpg n02092002-Scottish_deerhound
n02092002_6914.jpg n02092002-Scottish_deerhound
n02092002_6978.jpg n02092002-Scottish_deerhound
n02092002_6955.jpg n02092002-Scottish_deerhound
n02092002_700.jpg n02092002-Scottish_deerhound
n02092002_6729.jpg n02092002-Scottish_deerhound
n02092002_6723.jpg n02092002-Scottish_deerhound
n02092002_7696.jpg n02092002-Scottish_deerhound
n02092002_9895.jpg n02092002-Scottish_deerhound
n02092002_7791.jpg n02092002-Scottish_deerhound
n02092002_854.jpg n02092002-Scottish_deerhound
n02092002_9656.jpg n02092002-Scottish_deerhound
n02092002_8952.jpg n02092002-Scottish_deerhound
n02092002_7890.jpg n02092002-Scottish_deerhound
n02092002_983.jpg n02092002-Scottish_deerhound
n02092002_9863.jpg n02092002-Scottish_deerhound
n02092002_7835.jpg n02092002-Scottish_deerhound
n02092002_7667.jpg n02092002-Scottish_deerhound
n02092002_7743.jpg n02092002-Scottish_deerhound
n02092002_817.jpg n02092002-Scottish_deerhound
n02092002_9862.jpg n02092002-Scottish_deerhound
n02092002_9224.jpg n02092002-Scottish_deerhound
n02092002_885.jpg n02092002-Scottish_deerhound
n02092002_86.jpg n02092002-Scottish_deerhound
n02092002_846.jpg n02092002-Scottish_deerhound
n02092002_847.jpg n02092002-Scottish_deerhound
n02092002_7825.jpg n02092002-Scottish_deerhound
n02092002_9071.jpg n02092002-Scottish_deerhound
n02092002_942.jpg n02092002-Scottish_deerhound
n02092002_9785.jpg n02092002-Scottish_deerhound
n02092002_7751.jpg n02092002-Scottish_deerhound
n02089078_1174-0.jpg n02092002-Scottish_deerhound
n02089078_1026-0.jpg n02092002-Scottish_deerhound

n02089078_4466.jpg n02092002-Scottish_deerhound
n02089078_4140.jpg n02092002-Scottish_deerhound
n02089078_376.jpg n02092002-Scottish_deerhound
n02089078_695.jpg n02092002-Scottish_deerhound
n02089078_456.jpg n02092002-Scottish_deerhound
n02089078_727.jpg n02092002-Scottish_deerhound
n02089078_4544.jpg n02092002-Scottish_deerhound
n02089078_464.jpg n02092002-Scottish_deerhound
n02089078_782.jpg n02092002-Scottish_deerhound
n02089078_45.jpg n02092002-Scottish_deerhound
n02089078_965.jpg n02092002-Scottish_deerhound
n02089078_901.jpg n02092002-Scottish_deerhound
n02089078_682.jpg n02092002-Scottish_deerhound
n02089078_482.jpg n02092002-Scottish_deerhound
n02089078_641.jpg n02092002-Scottish_deerhound
n02089078_877.jpg n02092002-Scottish_deerhound
n02089078_4508.jpg n02092002-Scottish_deerhound
n02089078_715.jpg n02092002-Scottish_deerhound
n02089078_465.jpg n02092002-Scottish_deerhound
n02089078_663.jpg n02092002-Scottish_deerhound
n02089078_779.jpg n02092002-Scottish_deerhound
n02089078_933.jpg n02092002-Scottish_deerhound
n02089078_80.jpg n02092002-Scottish_deerhound
n02089078_52.jpg n02092002-Scottish_deerhound
n02089078_944.jpg n02092002-Scottish_deerhound
n02089078_461.jpg n02092002-Scottish_deerhound
n02089078_502.jpg n02092002-Scottish_deerhound
n02089078_825.jpg n02092002-Scottish_deerhound
n02091831_10576-0.jpg n02092002-Scottish_deerhound
n02091831_10290-0.jpg n02092002-Scottish_deerhound
n02091831_1036-0.jpg n02092002-Scottish_deerhound
n02091831_10215-0.jpg n02092002-Scottish_deerhound
n02091831_10215-1.jpg n02092002-Scottish_deerhound
n02091831_10733-0.jpg n02092002-Scottish_deerhound
n02091831_10639-0.jpg n02092002-Scottish_deerhound
n02091831_10722-0.jpg n02092002-Scottish_deerhound
n02091831_10803-0.jpg n02092002-Scottish_deerhound
n02091831_10593-0.jpg n02092002-Scottish_deerhound
n02091831_12653-0.jpg n02092002-Scottish_deerhound
n02091831_1565-0.jpg n02092002-Scottish_deerhound
n02091831_11421-0.jpg n02092002-Scottish_deerhound
n02091831_13354-0.jpg n02092002-Scottish_deerhound
n02091831_13361-0.jpg n02092002-Scottish_deerhound
n02091831_1110-0.jpg n02092002-Scottish_deerhound
n02091831_1495-0.jpg n02092002-Scottish_deerhound
n02091831_151-0.jpg n02092002-Scottish_deerhound
n02091831_10823-0.jpg n02092002-Scottish_deerhound
n02091831_13935-0.jpg n02092002-Scottish_deerhound
n02091831_12881-0.jpg n02092002-Scottish_deerhound
n02091831_13566-0.jpg n02092002-Scottish_deerhound
n02091831_11553-0.jpg n02092002-Scottish_deerhound
n02091831_1730-0.jpg n02092002-Scottish_deerhound
n02091831_1696-1.jpg n02092002-Scottish_deerhound
n02091831_1696-0.jpg n02092002-Scottish_deerhound
n02091831_11498-0.jpg n02092002-Scottish_deerhound
n02091831_11498-1.jpg n02092002-Scottish_deerhound
n02091831_1182-0.jpg n02092002-Scottish_deerhound
n02091831_12945-0.jpg n02092002-Scottish_deerhound
n02091831_10822-0.jpg n02092002-Scottish_deerhound
n02091831_1118-0.jpg n02092002-Scottish_deerhound
n02091831_11177-0.jpg n02092002-Scottish_deerhound
n02091831_13486-0.jpg n02092002-Scottish_deerhound
n02091831_1400-0.jpg n02092002-Scottish_deerhound
n02091831_1594-0.jpg n02092002-Scottish_deerhound
n02091831_1594-1.jpg n02092002-Scottish_deerhound
n02091831_13767-0.jpg n02092002-Scottish_deerhound
n02091831_13640-0.jpg n02092002-Scottish_deerhound
n02091831_1563-0.jpg n02092002-Scottish_deerhound
n02091831_13774-0.jpg n02092002-Scottish_deerhound
n02091831_1623-0.jpg n02092002-Scottish_deerhound
n02091831_13536-0.jpg n02092002-Scottish_deerhound
n02091831_1387-0.jpg n02092002-Scottish_deerhound

n02091831_764-0.jpg n02092002-Scottish_deerhound
n02091831_8223-0.jpg n02092002-Scottish_deerhound
n02091831_801-0.jpg n02092002-Scottish_deerhound
n02091831_8847-0.jpg n02092002-Scottish_deerhound
n02091831_749-0.jpg n02092002-Scottish_deerhound
n02091831_736-0.jpg n02092002-Scottish_deerhound
n02091831_7497-0.jpg n02092002-Scottish_deerhound
n02091831_8633-0.jpg n02092002-Scottish_deerhound
n02091831_7895-0.jpg n02092002-Scottish_deerhound
n02091831_8404-0.jpg n02092002-Scottish_deerhound
n02091831_8843-0.jpg n02092002-Scottish_deerhound
n02091831_7957-0.jpg n02092002-Scottish_deerhound
n02091831_8028-0.jpg n02092002-Scottish_deerhound
n02091831_8028-1.jpg n02092002-Scottish_deerhound
n02091831_7846-0.jpg n02092002-Scottish_deerhound
n02091831_8401-0.jpg n02092002-Scottish_deerhound
n02091831_8401-1.jpg n02092002-Scottish_deerhound
n02091831_8160-0.jpg n02092002-Scottish_deerhound
n02091831_735-0.jpg n02092002-Scottish_deerhound
n02091831_735-1.jpg n02092002-Scottish_deerhound
n02091831_843-0.jpg n02092002-Scottish_deerhound
n02091831_7769-0.jpg n02092002-Scottish_deerhound
n02091831_7665-0.jpg n02092002-Scottish_deerhound
n02091831_7665-1.jpg n02092002-Scottish_deerhound
n02091831_7393-0.jpg n02092002-Scottish_deerhound
n02091831_848-0.jpg n02092002-Scottish_deerhound
n02091831_7977-0.jpg n02092002-Scottish_deerhound
n02091831_9731-0.jpg n02092002-Scottish_deerhound
n02091831_9731-1.jpg n02092002-Scottish_deerhound
n02091831_9263-0.jpg n02092002-Scottish_deerhound
n02091831_97-0.jpg n02092002-Scottish_deerhound
n02091831_9856-0.jpg n02092002-Scottish_deerhound
n02091831_956-0.jpg n02092002-Scottish_deerhound
n02091831_961-0.jpg n02092002-Scottish_deerhound
n02091831_9190-0.jpg n02092002-Scottish_deerhound
n02091831_10576.jpg n02092002-Scottish_deerhound
n02091831_10290.jpg n02092002-Scottish_deerhound
n02091831_1036.jpg n02092002-Scottish_deerhound
n02091831_10215.jpg n02092002-Scottish_deerhound
n02091831_10733.jpg n02092002-Scottish_deerhound
n02091831_10722.jpg n02092002-Scottish_deerhound
n02091831_10639.jpg n02092002-Scottish_deerhound
n02091831_10593.jpg n02092002-Scottish_deerhound
n02091831_10803.jpg n02092002-Scottish_deerhound
n02091831_12653.jpg n02092002-Scottish_deerhound
n02091831_1565.jpg n02092002-Scottish_deerhound
n02091831_11421.jpg n02092002-Scottish_deerhound
n02091831_1110.jpg n02092002-Scottish_deerhound
n02091831_13354.jpg n02092002-Scottish_deerhound
n02091831_13361.jpg n02092002-Scottish_deerhound
n02091831_151.jpg n02092002-Scottish_deerhound
n02091831_1495.jpg n02092002-Scottish_deerhound
n02091831_10823.jpg n02092002-Scottish_deerhound
n02091831_13935.jpg n02092002-Scottish_deerhound
n02091831_12881.jpg n02092002-Scottish_deerhound
n02091831_11553.jpg n02092002-Scottish_deerhound
n02091831_13566.jpg n02092002-Scottish_deerhound
n02091831_1730.jpg n02092002-Scottish_deerhound
n02091831_1696.jpg n02092002-Scottish_deerhound
n02091831_11498.jpg n02092002-Scottish_deerhound
n02091831_1182.jpg n02092002-Scottish_deerhound
n02091831_12945.jpg n02092002-Scottish_deerhound
n02091831_10822.jpg n02092002-Scottish_deerhound
n02091831_1118.jpg n02092002-Scottish_deerhound
n02091831_11177.jpg n02092002-Scottish_deerhound
n02091831_13486.jpg n02092002-Scottish_deerhound
n02091831_1400.jpg n02092002-Scottish_deerhound
n02091831_1594.jpg n02092002-Scottish_deerhound
n02091831_13767.jpg n02092002-Scottish_deerhound
n02091831_13640.jpg n02092002-Scottish_deerhound
n02091831_1563.jpg n02092002-Scottish_deerhound
n02091831_1623.jpg n02092002-Scottish_deerhound

n02091831_4626.jpg n02092002-Scottish_deerhound
n02091831_4463.jpg n02092002-Scottish_deerhound
n02091831_3909.jpg n02092002-Scottish_deerhound
n02091831_4755.jpg n02092002-Scottish_deerhound
n02091831_410.jpg n02092002-Scottish_deerhound
n02091831_3847.jpg n02092002-Scottish_deerhound
n02091831_3962.jpg n02092002-Scottish_deerhound
n02091831_3675.jpg n02092002-Scottish_deerhound
n02091831_4030.jpg n02092002-Scottish_deerhound
n02091831_4487.jpg n02092002-Scottish_deerhound
n02091831_3846.jpg n02092002-Scottish_deerhound
n02091831_3875.jpg n02092002-Scottish_deerhound
n02091831_4644.jpg n02092002-Scottish_deerhound
n02091831_4283.jpg n02092002-Scottish_deerhound
n02091831_4119.jpg n02092002-Scottish_deerhound
n02091831_4846.jpg n02092002-Scottish_deerhound
n02091831_355.jpg n02092002-Scottish_deerhound
n02091831_3760.jpg n02092002-Scottish_deerhound
n02091831_4087.jpg n02092002-Scottish_deerhound
n02091831_5123.jpg n02092002-Scottish_deerhound
n02091831_4966.jpg n02092002-Scottish_deerhound
n02091831_5244.jpg n02092002-Scottish_deerhound
n02091831_5384.jpg n02092002-Scottish_deerhound
n02091831_509.jpg n02092002-Scottish_deerhound
n02091831_5596.jpg n02092002-Scottish_deerhound
n02091831_4980.jpg n02092002-Scottish_deerhound
n02091831_5436.jpg n02092002-Scottish_deerhound
n02091831_5369.jpg n02092002-Scottish_deerhound
n02091831_5020.jpg n02092002-Scottish_deerhound
n02091831_5482.jpg n02092002-Scottish_deerhound
n02091831_55.jpg n02092002-Scottish_deerhound
n02091831_5216.jpg n02092002-Scottish_deerhound
n02091831_5654.jpg n02092002-Scottish_deerhound
n02091831_5359.jpg n02092002-Scottish_deerhound
n02091831_7237.jpg n02092002-Scottish_deerhound
n02091831_648.jpg n02092002-Scottish_deerhound
n02091831_7051.jpg n02092002-Scottish_deerhound
n02091831_6323.jpg n02092002-Scottish_deerhound
n02091831_573.jpg n02092002-Scottish_deerhound
n02091831_699.jpg n02092002-Scottish_deerhound
n02091831_7030.jpg n02092002-Scottish_deerhound
n02091831_6114.jpg n02092002-Scottish_deerhound
n02091831_7066.jpg n02092002-Scottish_deerhound
n02091831_6757.jpg n02092002-Scottish_deerhound
n02091831_7244.jpg n02092002-Scottish_deerhound
n02091831_7169.jpg n02092002-Scottish_deerhound
n02091831_6427.jpg n02092002-Scottish_deerhound
n02091831_5712.jpg n02092002-Scottish_deerhound
n02091831_7287.jpg n02092002-Scottish_deerhound
n02091831_5745.jpg n02092002-Scottish_deerhound
n02091831_725.jpg n02092002-Scottish_deerhound
n02091831_5879.jpg n02092002-Scottish_deerhound
n02091831_6406.jpg n02092002-Scottish_deerhound
n02091831_6451.jpg n02092002-Scottish_deerhound
n02091831_5692.jpg n02092002-Scottish_deerhound
n02091831_6139.jpg n02092002-Scottish_deerhound
n02091831_627.jpg n02092002-Scottish_deerhound
n02091831_6582.jpg n02092002-Scottish_deerhound
n02091831_566.jpg n02092002-Scottish_deerhound
n02091831_6308.jpg n02092002-Scottish_deerhound
n02091831_878.jpg n02092002-Scottish_deerhound
n02091831_764.jpg n02092002-Scottish_deerhound
n02091831_8223.jpg n02092002-Scottish_deerhound
n02091831_801.jpg n02092002-Scottish_deerhound
n02091831_8847.jpg n02092002-Scottish_deerhound
n02091831_749.jpg n02092002-Scottish_deerhound
n02091831_736.jpg n02092002-Scottish_deerhound
n02091831_7497.jpg n02092002-Scottish_deerhound
n02091831_8633.jpg n02092002-Scottish_deerhound
n02091831_8843.jpg n02092002-Scottish_deerhound
n02091831_8404.jpg n02092002-Scottish_deerhound
n02091831_7895.jpg n02092002-Scottish_deerhound

n02095314_3242.jpg n02092002-Scottish_deerhound
n02095314_3185.jpg n02092002-Scottish_deerhound
n02095314_3495.jpg n02092002-Scottish_deerhound
n02095314_3299.jpg n02092002-Scottish_deerhound
n02095314_3472.jpg n02092002-Scottish_deerhound
n02095314_3364.jpg n02092002-Scottish_deerhound
n02095314_3509.jpg n02092002-Scottish_deerhound
n02095314_464.jpg n02092002-Scottish_deerhound
n02095314_318.jpg n02092002-Scottish_deerhound
n02095314_3295.jpg n02092002-Scottish_deerhound
n02095314_401.jpg n02092002-Scottish_deerhound
n02095314_3343.jpg n02092002-Scottish_deerhound
n02095314_3166.jpg n02092002-Scottish_deerhound
n02095314_3246.jpg n02092002-Scottish_deerhound
n02095314_3084.jpg n02092002-Scottish_deerhound
n02095314_3451.jpg n02092002-Scottish_deerhound
n02095314_3240.jpg n02092002-Scottish_deerhound
n02095314_3395.jpg n02092002-Scottish_deerhound
n02095314_3483.jpg n02092002-Scottish_deerhound
n02095314_3054.jpg n02092002-Scottish_deerhound
n02095314_3153.jpg n02092002-Scottish_deerhound
n02095314_398.jpg n02092002-Scottish_deerhound
n02095314_3512.jpg n02092002-Scottish_deerhound
n02095314_3372.jpg n02092002-Scottish_deerhound
n02095314_3217.jpg n02092002-Scottish_deerhound
n02095314_397.jpg n02092002-Scottish_deerhound
n02095314_3527.jpg n02092002-Scottish_deerhound
n02095314_3227.jpg n02092002-Scottish_deerhound
n02095314_3091.jpg n02092002-Scottish_deerhound
n02095314_504.jpg n02092002-Scottish_deerhound
n02095314_493.jpg n02092002-Scottish_deerhound
n02095314_550.jpg n02092002-Scottish_deerhound
n02095314_691.jpg n02092002-Scottish_deerhound
n02095314_613.jpg n02092002-Scottish_deerhound
n02095314_481.jpg n02092002-Scottish_deerhound
n02095314_80.jpg n02092002-Scottish_deerhound
n02095314_792.jpg n02092002-Scottish_deerhound
n02095314_725.jpg n02092002-Scottish_deerhound
n02095314_591.jpg n02092002-Scottish_deerhound
n02095314_594.jpg n02092002-Scottish_deerhound
n02095314_777.jpg n02092002-Scottish_deerhound
n02095314_662.jpg n02092002-Scottish_deerhound
n02095314_651.jpg n02092002-Scottish_deerhound
n02095314_669.jpg n02092002-Scottish_deerhound
n02095314_663.jpg n02092002-Scottish_deerhound
n02095314_740.jpg n02092002-Scottish_deerhound
n02095314_547.jpg n02092002-Scottish_deerhound
n02095314_942.jpg n02092002-Scottish_deerhound
n02095314_807.jpg n02092002-Scottish_deerhound
n02095314_928.jpg n02092002-Scottish_deerhound
n02095314_956.jpg n02092002-Scottish_deerhound
n02095314_996.jpg n02092002-Scottish_deerhound
n02095314_969.jpg n02092002-Scottish_deerhound
n02095314_963.jpg n02092002-Scottish_deerhound
n02092002_10911-0.jpg n02095314-wire-haired_fox_terrier
n02092002_11088-0.jpg n02095314-wire-haired_fox_terrier
n02092002_1029-0.jpg n02095314-wire-haired_fox_terrier
n02092002_109-0.jpg n02095314-wire-haired_fox_terrier
n02092002_1130-0.jpg n02095314-wire-haired_fox_terrier
n02092002_10693-0.jpg n02095314-wire-haired_fox_terrier
n02092002_11390-0.jpg n02095314-wire-haired_fox_terrier
n02092002_1147-0.jpg n02095314-wire-haired_fox_terrier
n02092002_11131-0.jpg n02095314-wire-haired_fox_terrier
n02092002_11428-0.jpg n02095314-wire-haired_fox_terrier
n02092002_1086-1.jpg n02095314-wire-haired_fox_terrier
n02092002_1086-0.jpg n02095314-wire-haired_fox_terrier
n02092002_11087-0.jpg n02095314-wire-haired_fox_terrier
n02092002_10699-0.jpg n02095314-wire-haired_fox_terrier
n02092002_11459-0.jpg n02095314-wire-haired_fox_terrier
n02092002_11105-0.jpg n02095314-wire-haired_fox_terrier
n02092002_11245-0.jpg n02095314-wire-haired_fox_terrier
n02092002_11105-1.jpg n02095314-wire-haired_fox_terrier


```
n02095314_651.jpg n02095314-wire-haired_fox_terrier  
n02095314_669.jpg n02095314-wire-haired_fox_terrier  
n02095314_663.jpg n02095314-wire-haired_fox_terrier  
n02095314_740.jpg n02095314-wire-haired_fox_terrier  
n02095314_547.jpg n02095314-wire-haired_fox_terrier  
n02095314_942.jpg n02095314-wire-haired_fox_terrier  
n02095314_807.jpg n02095314-wire-haired_fox_terrier  
n02095314_928.jpg n02095314-wire-haired_fox_terrier  
n02095314_956.jpg n02095314-wire-haired_fox_terrier  
n02095314_996.jpg n02095314-wire-haired_fox_terrier  
n02095314_969.jpg n02095314-wire-haired_fox_terrier  
n02095314_963.jpg n02095314-wire-haired_fox_terrier
```

Out[14] :

0

In [21] :

```
def images_select(num_imag):  
    def count_of_images(dog_breed, image_list):  
        count = 0  
        for i in image_list:  
            if dog_breed in i: # Check if the breed is contained in the image path  
                count += 1  
        print(f"Count of {dog_breed}: {count}")  
        if count < num_imag:  
            return True  
        else:  
            return False  
  
    images_hist = []  
    for i, j in dog_breeds.items():  
        for k in dog_images_cropped:  
            print(f"Checking image {k} for breed {j}")  
            if j in k: # Check if the breed is contained in the image path  
                print(f"Match found for breed {j} in image {k}")  
                if count_of_images(j, images_hist):  
                    images_hist.append(k)  
    return images_hist  
  
# Call the function with num_imag = 2  
images = images_select(2)  
print(images)
```

Streaming output truncated to the last 5000 lines.

```
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1278-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1177-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1080-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1884-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1820-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1772-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1672-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1866-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_138-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_188-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1814-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1577-0.jpg for breed n02091831-Saluki  
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1582-0.jpg for breed n02091831-Saluki
```



```
esizedImages/n02095314-wire-haired_fox_terrier/n02095314_80/.jpg
Count of n02095314-wire-haired_fox_terrier: 2
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_928.jpg for breed n02095314-wire-haired_fox_terrier
Match found for breed n02095314-wire-haired_fox_terrier in image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_928.jpg
Count of n02095314-wire-haired_fox_terrier: 2
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_956.jpg for breed n02095314-wire-haired_fox_terrier
Match found for breed n02095314-wire-haired_fox_terrier in image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_956.jpg
Count of n02095314-wire-haired_fox_terrier: 2
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_996.jpg for breed n02095314-wire-haired_fox_terrier
Match found for breed n02095314-wire-haired_fox_terrier in image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_996.jpg
Count of n02095314-wire-haired_fox_terrier: 2
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_969.jpg for breed n02095314-wire-haired_fox_terrier
Match found for breed n02095314-wire-haired_fox_terrier in image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_969.jpg
Count of n02095314-wire-haired_fox_terrier: 2
Checking image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_963.jpg for breed n02095314-wire-haired_fox_terrier
Match found for breed n02095314-wire-haired_fox_terrier in image /content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_963.jpg
Count of n02095314-wire-haired_fox_terrier: 2
['/content/drive/MyDrive/ResizedImages/n02089078-black-and-tan_coonhound/n02089078_1174-0.jpg', '/content/drive/MyDrive/ResizedImages/n02089078-black-and-tan_coonhound/n02089078_1026-0.jpg', '/content/drive/MyDrive/ResizedImages/n02091831-Saluki/n02091831_10576-0.jpg', '/content/drive/MyDrive/ResizedImages/n02091831-Saluki/n02091831_10290-0.jpg', '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_10911-0.jpg', '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11088-0.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1268-0.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1054-0.jpg']
```

In [22]:

```
def images_select(num_imag):
    def count_of_images(dog_breed, image_list):
        count = 0
        for i in image_list:
            if dog_breed in i: # Check if the breed is contained in the image path
                count += 1
        print(f"Count of {dog_breed}: {count}")
        if count == 0:
            print(f"No images found for {dog_breed}")
            return []
        elif count == 1:
            print(f"Only 1 image found for {dog_breed}. Adding it.")
            for i in image_list:
                if dog_breed in i:
                    return [i]
        elif count == 2:
            print(f"Exactly 2 images found for {dog_breed}. Adding both.")
            images = []
            for i in image_list:
                if dog_breed in i:
                    images.append(i)
            return images
        else:
            print(f"More than 2 images found for {dog_breed}. Adding the first two.")
            images = []
            for i in image_list:
                if dog_breed in i and len(images) < 2:
                    images.append(i)
            return images

    images_hist = []
    for i, j in dog_breeds.items():
        for k in dog_images_cropped:
```

```
if j in k: # Check if the breed is contained in the image path
    selected_images = count_of_images(j, images_hist)
    images_hist.extend(selected_images)

return images_hist

# Call the function with num_imag = 2
images = images_select(2)
print(images)
```


In [23]:

```
# Check the dog breeds and cropped images
print("Dog Breeds:")
print(dog_breeds)

print("\nDog Images Cropped:")
print(dog_images_cropped)
```

Dog Breeds:

```
{0: 'n02089078-black-and-tan_coonhound', 1: 'n02091831-Saluki', 2: 'n02092002-Scottish_deerhound', 3: 'n02095314-wire-haired_fox_terrier'}
```

Dog Images Cropped:


```
MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_481.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_80.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_792.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_725.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_591.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_594.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_777.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_662.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_651.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_669.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_663.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_740.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_547.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_942.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_807.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_928.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_956.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_996.jpg', '/content/drive/MyDrive/ResizedImages/n02095314_969.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_963.jpg']
```

In [24]:

```
def images_select(num_imag):
    def count_of_images(dog_breed, image_list):
        count = 0
        for i in image_list:
            if dog_breed in i: # Check if the breed is contained in the image path
                count += 1
        print(f"Count of {dog_breed}: {count}")
        if count == 0:
            print(f"No images found for {dog_breed}")
            return []
        elif count == 1:
            print(f"Only 1 image found for {dog_breed}. Adding it.")
            for i in image_list:
                if dog_breed in i:
                    return [i]
        elif count == 2:
            print(f"Exactly 2 images found for {dog_breed}. Adding both.")
            images = []
            for i in image_list:
                if dog_breed in i:
                    images.append(i)
            return images
        else:
            print(f"More than 2 images found for {dog_breed}. Adding the first two.")
            images = []
            for i in image_list:
                if dog_breed in i and len(images) < 2:
                    images.append(i)
            return images

    images_hist = []
    for i, j in dog_breeds.items():
        for k in dog_images_cropped:
            if j in k: # Check if the breed is contained in the image path
                selected_images = count_of_images(j, images_hist)
                images_hist.extend(selected_images)

    return images_hist

# Call the function with num_imag = 2
images = images_select(2)
print(images)
```

```
Count of n02089078-black-and-tan_coonhound: 0
No images found for n02089078-black-and-tan_coonhound
Count of n02089078-black-and-tan_coonhound: 0
No images found for n02089078-black-and-tan_coonhound
Count of n02089078-black-and-tan_coonhound: 0
```


In [25]:

```
def images_select(num_imag):
    images_hist = []
    for breed_name in dog_breeds.values():
        count = 0
        for image_path in dog_images_cropped:
            if breed_name in image_path:
                images_hist.append(image_path)
                count += 1
            if count == num_imag:
                break
    return images_hist
```

```
# Call the function with num_imaq = 2
```

```
images = images_select(2)
print(images)

['/content/drive/MyDrive/ResizedImages/n02089078-black-and-tan_coonhound/n02089078_1174-0.jpg', '/content/drive/MyDrive/ResizedImages/n02089078-black-and-tan_coonhound/n02089078_1026-0.jpg', '/content/drive/MyDrive/ResizedImages/n02091831-Saluki/n02091831_10576-0.jpg', '/content/drive/MyDrive/ResizedImages/n02091831-Saluki/n02091831_10290-0.jpg', '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_10911-0.jpg', '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11088-0.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1268-0.jpg', '/content/drive/MyDrive/ResizedImages/n02095314-wire-haired_fox_terrier/n02095314_1054-0.jpg']
```

In [26]:

```
def Histogram_Equalization(image, x, title):
    img = cv2.imread(image, cv2.IMREAD_GRAYSCALE)
    ax[x, 0].imshow(img, cmap='gray')
    ax[x, 0].set_title(title)
    ax[x, 1].hist(img.flatten(), bins=256)
    ax[x, 1].set_title('Histogram')

# Define the list of dog breeds
dogs = ['n02089078-black-and-tan_coonhound', 'n02091831-Saluki', 'n02092002-Scottish_deerhound', 'n02095314-wire-haired_fox_terrier']

# Create subplots for visualization
fig, ax = plt.subplots(8, 2, figsize=(10, 12))

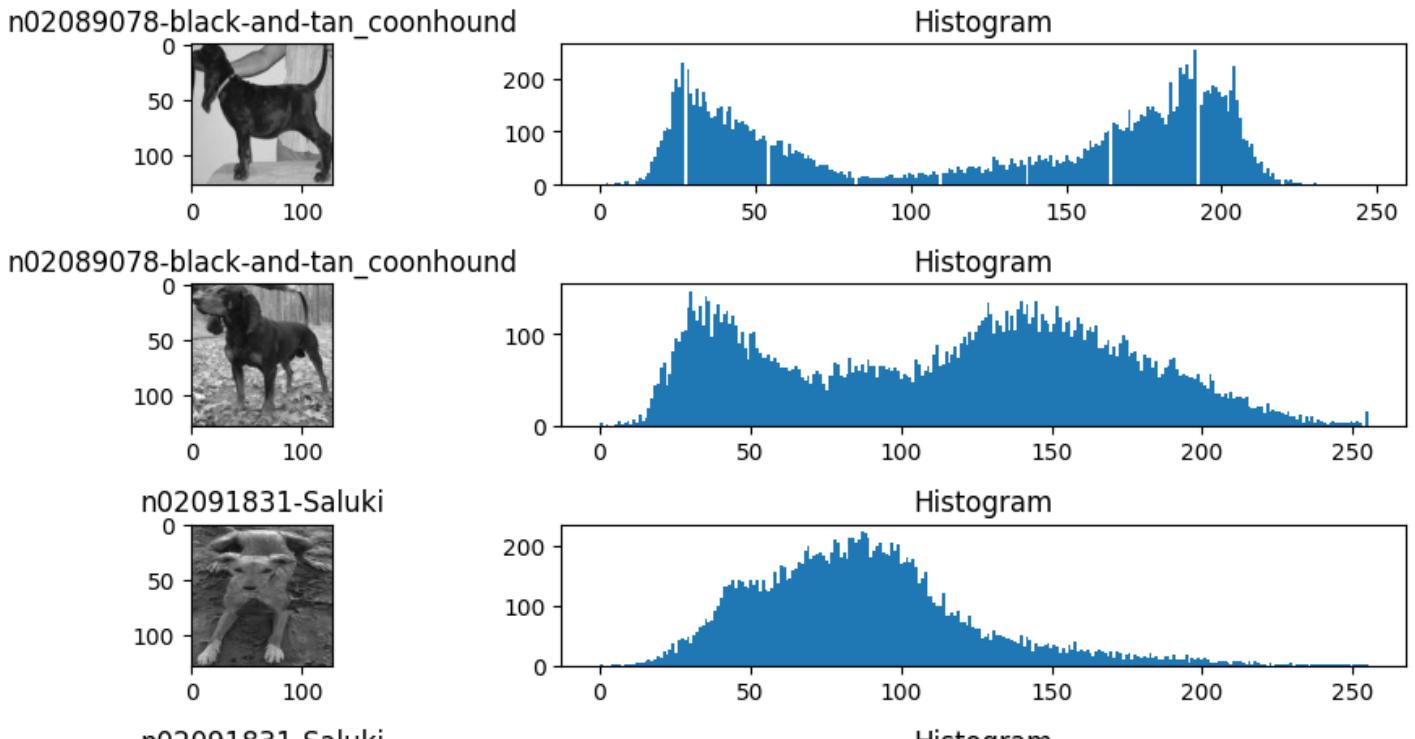
# Initialize index and title
ind = 0
title = dogs[ind]

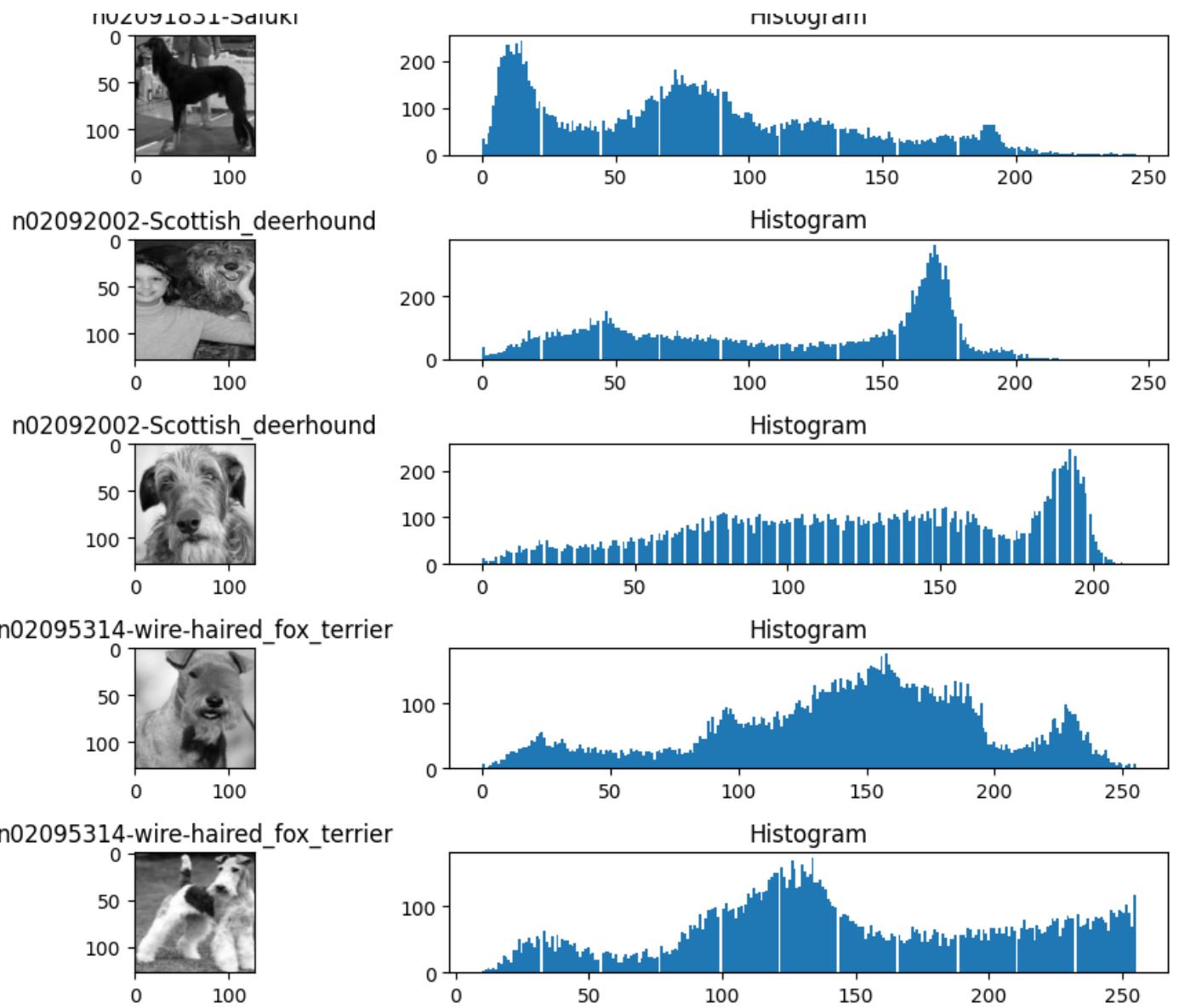
# Loop through the selected images
for x, i in enumerate(images):

    # Update title for every two images
    if x != 7:
        if x % 2 == 0 and x != 0:
            title = dogs[ind + 1]
            ind += 1

    # Call the Histogram_Equalization function
    Histogram_Equalization(i, x, title)

plt.tight_layout()
plt.show()
```





In [27]:

```

def Intensity_Equalization(image, x, title):
    img = cv2.imread(image, cv2.IMREAD_GRAYSCALE)
    equ = cv2.equalizeHist(img)
    ax[x, 0].imshow(equ, cmap='gray')
    ax[x, 0].set_title(title)
    ax[x, 1].hist(equ.flatten(), bins=256)
    ax[x, 1].set_title('Histogram')

# Define the list of dog breeds
dogs = ['n02089078-black-and-tan_coonhound', 'n02091831-Saluki', 'n02092002-Scottish_deerhound', 'n02095314-wire-haired_fox_terrier']

# Create subplots for visualization
fig, ax = plt.subplots(8, 2, figsize=(10, 12))

# Initialize index and title
ind = 0
title = dogs[ind]

# Loop through the selected images
for x, i in enumerate(images):

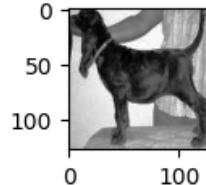
    # Update title for every two images
    if x != 7:
        if x % 2 == 0 and x != 0:
            title = dogs[ind + 1]
            ind += 1

    # Call the Intensity_Equalization function
    Intensity_Equalization(i, x, title)

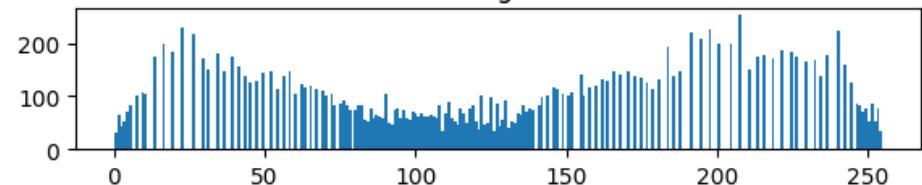
```

```
plt.tight_layout()  
plt.show()
```

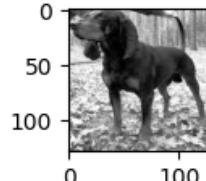
n02089078-black-and-tan_coonhound



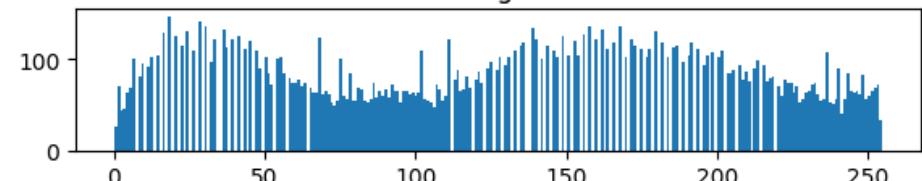
Histogram



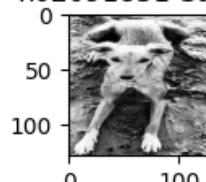
n02089078-black-and-tan_coonhound



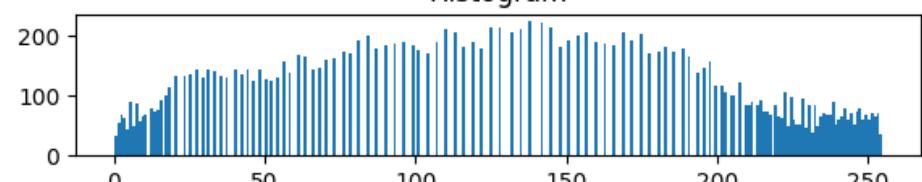
Histogram



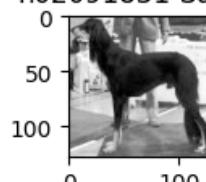
n02091831-Saluki



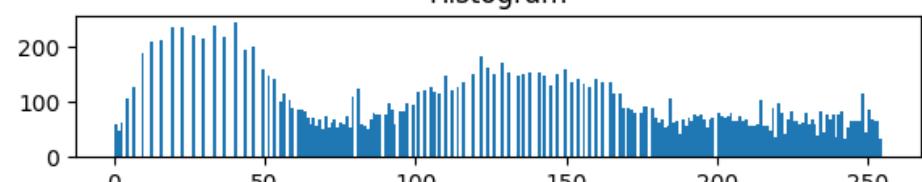
Histogram



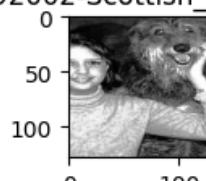
n02091831-Saluki



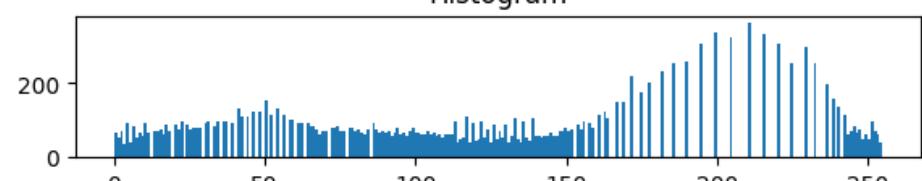
Histogram



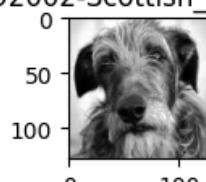
n02092002-Scottish_deerhound



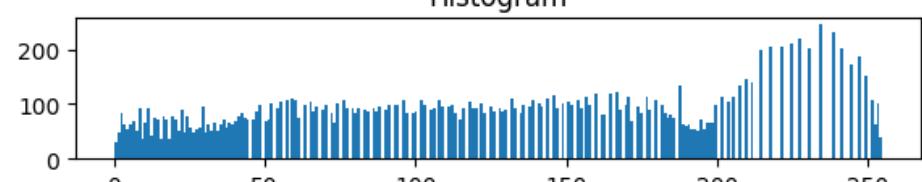
Histogram



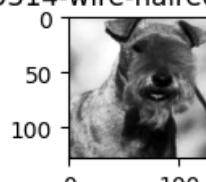
n02092002-Scottish_deerhound



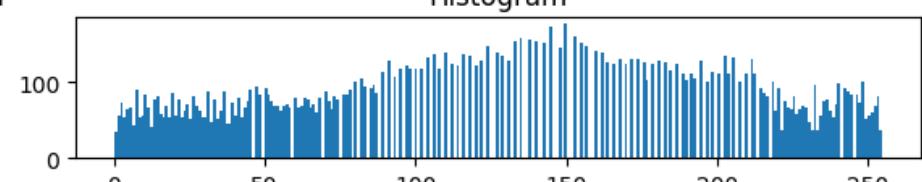
Histogram



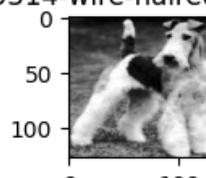
n02095314-wire-haired_fox_terrier



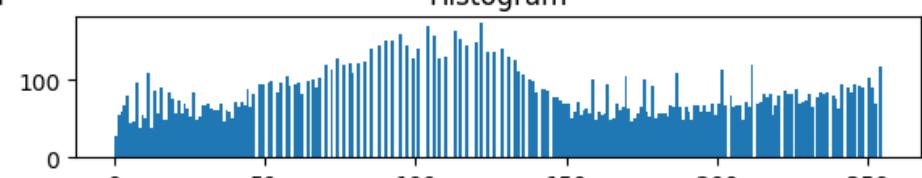
Histogram



n02095314-wire-haired_fox_terrier



Histogram



In [28]:

```
import cv2  
import matplotlib.pyplot as plt
```

```

from skimage import filters

# Function to perform edge detection using Sobel filter
def Sobel_Edge_Detection(image, x, title):
    img = cv2.imread(image, cv2.IMREAD_GRAYSCALE)

    # Apply Sobel filter for edge detection
    edges = filters.sobel(img)

    ax[x, 0].imshow(img, cmap='gray')
    ax[x, 0].set_title(title + ' - Grayscale Image')

    ax[x, 1].imshow(edges, cmap='gray')
    ax[x, 1].set_title(title + ' - Sobel Edge Detection')

# Define the list of dog breeds
dogs = ['n02089078-black-and-tan_coonhound', 'n02091831-Saluki', 'n02092002-Scottish_deerhound', 'n02095314-wire-haired_fox_terrier']

# Initialize index and title
ind = 0
title = dogs[ind]

fig, ax = plt.subplots(8, 2, figsize=(10, 12))

# Loop through the selected images
for x, i in enumerate(images):
    # Update title for every two images
    if x != 7:
        if x % 2 == 0 and x != 0:
            title = dogs[ind + 1]
            ind += 1
    # Call the Sobel_Edge_Detection function
    Sobel_Edge_Detection(i, x, title)

plt.tight_layout()
plt.show()

```





In [29]:

```

import cv2
import numpy as np
import matplotlib.pyplot as plt
from skimage import filters, exposure
import os

# Function to process each selected image
def process_image(image_path, cls):
    # Load color image
    color_img = cv2.imread(image_path)

    # Convert to grayscale
    gray_img = cv2.cvtColor(color_img, cv2.COLOR_BGR2GRAY)

    # Calculate edge angles using Sobel operators
    angle_sobel = np.mod(np.arctan2(filters.sobel_v(gray_img), filters.sobel_h(gray_img)), np.pi)

    # Obtain histogram with 36 bins
    hist, bin_edges = exposure.histogram(angle_sobel.flatten(), nbins=36)

    return gray_img, angle_sobel, hist, bin_edges, cls

# Define the path to the main folder containing class folders
main_folder = '/content/drive/MyDrive/ResizedImages/'

# List of class folders (assuming each folder represents a different class)
image_classes = ['n02089078-black-and-tan_coonhound', 'n02091831-Saluki', 'n02092002-Scottish_deerhound', 'n02095314-wire-haired_fox_terrier']

# Plot the images with their corresponding edge histogram values
fig, axes = plt.subplots(len(image_classes), 2, figsize=(10, 12))
fig.suptitle('Edge Histograms for Grayscale Images', fontsize=16)

for idx, cls in enumerate(image_classes):
    class_directory = os.path.join(main_folder, cls)

    # Iterate over files in the class directory
    for filename in os.listdir(class_directory):
        # Check if the file has a valid image extension (you can customize this based on your image formats)

```

```

if filename.lower().endswith('.jpg'):
    image_path = os.path.join(class_directory, filename)

try:
    gray_img, angle_sobel, hist, bin_edges, selected_cls = process_image(image_path, cls)

    # Plot grayscale image
    axes[idx, 0].imshow(gray_img, cmap='gray')
    axes[idx, 0].set_title(f'{selected_cls} - Grayscale Image')

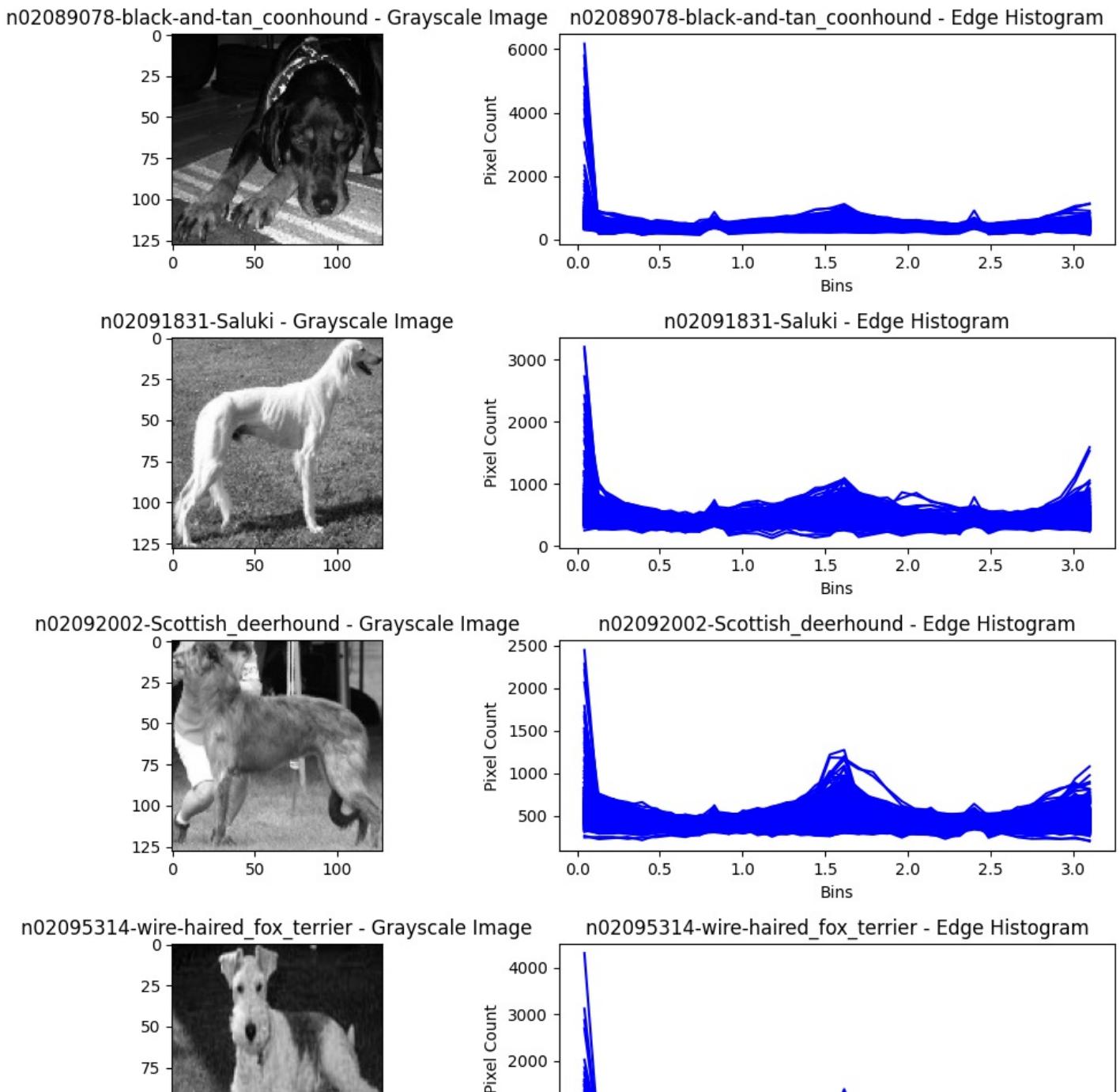
    # Plot edge histogram
    axes[idx, 1].plot(bin_edges, hist, color='blue')
    axes[idx, 1].set_title(f'{selected_cls} - Edge Histogram')
    axes[idx, 1].set_xlabel('Bins')
    axes[idx, 1].set_ylabel('Pixel Count')

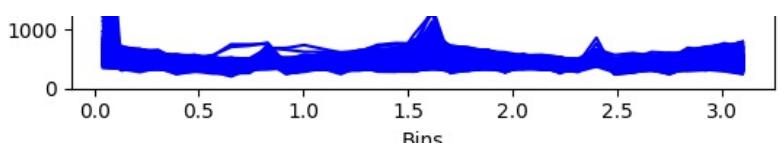
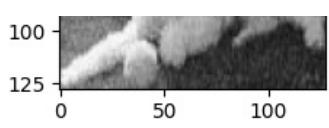
except Exception as e:
    print(f"Error processing image {filename}: {str(e)}")

plt.tight_layout(rect=[0, 0.03, 1, 0.95])
plt.show()

```

Edge Histograms for Grayscale Images





In [30]:

```
import cv2
import numpy as np
from skimage import filters, exposure
from sklearn.metrics.pairwise import euclidean_distances, manhattan_distances, cosine_distances

# Function to compute edge histogram
def compute_edge_histogram(img):
    gray_img = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)
    angle_sobel = np.mod(np.arctan2(filters.sobel_v(gray_img), filters.sobel_h(gray_img)), np.pi)
    hist, _ = exposure.histogram(angle_sobel.flatten(), nbins=36)
    return hist

# Function to compare histograms using different distance metrics
def compare_histograms(hist1, hist2):
    euclidean_dist = euclidean_distances(hist1.reshape(1, -1), hist2.reshape(1, -1))
    manhattan_dist = manhattan_distances(hist1.reshape(1, -1), hist2.reshape(1, -1))
    cosine_dist = cosine_distances(hist1.reshape(1, -1), hist2.reshape(1, -1))
    return euclidean_dist, manhattan_dist, cosine_dist

# Load the images
img1 = cv2.imread('/content/drive/MyDrive/ResizedImages/n02089078-black-and-tan_coonhound/n02089078_1026-0.jpg')
img2 = cv2.imread('/content/drive/MyDrive/ResizedImages/n02089078-black-and-tan_coonhound/n02089078_1174-0.jpg')
img3 = cv2.imread('/content/drive/MyDrive/ResizedImages/n02091831-Saluki/n02091831_10576-0.jpg')

if img1 is None or img2 is None or img3 is None:
    print("Error: One or more images could not be read.")

# Compute edge histograms for the images
hist_img1 = compute_edge_histogram(img1)
hist_img2 = compute_edge_histogram(img2)
hist_img3 = compute_edge_histogram(img3)

# Compare histograms using different distance metrics
euclidean_dist_same_class, manhattan_dist_same_class, cosine_dist_same_class = compare_histograms(hist_img1, hist_img2)
euclidean_dist_diff_class, manhattan_dist_diff_class, cosine_dist_diff_class = compare_histograms(hist_img1, hist_img3)

# Display the computed distances
print("Euclidean Distance (Same Class):", euclidean_dist_same_class)
print("Manhattan Distance (Same Class):", manhattan_dist_same_class)
print("Cosine Distance (Same Class):", cosine_dist_same_class)

print("\nEuclidean Distance (Different Class):", euclidean_dist_diff_class)
print("Manhattan Distance (Different Class):", manhattan_dist_diff_class)
print("Cosine Distance (Different Class):", cosine_dist_diff_class)
```

Euclidean Distance (Same Class): [[645.2115932]]

Manhattan Distance (Same Class): [[2966.]]

Cosine Distance (Same Class): [[0.02607859]]

Euclidean Distance (Different Class): [[911.3802719]]

Manhattan Distance (Different Class): [[4434.]]

Cosine Distance (Different Class): [[0.05181831]]

In [31]:

```
import cv2
import matplotlib.pyplot as plt
```

```

from skimage.feature import hog

# Function to compute HOG descriptors and visualize HOG image
def compute_and_visualize_hog(image):
    # Compute HOG descriptors
    hog_features, hog_image = hog(image, visualize=True)

    # Visualize the original image
    plt.figure(figsize=(8, 4))
    plt.subplot(121)
    plt.imshow(image, cmap='gray')
    plt.title('Original Image')
    plt.axis('off')

    # Visualize the HOG descriptors
    plt.subplot(122)
    plt.imshow(hog_image, cmap='gray')
    plt.title('HOG Descriptors')
    plt.axis('off')

plt.show()

# Load the image
image_path = '/content/drive/MyDrive/MyImages/n02092002-Scottish_deerhound/n02092002_1029.jpg'
image = cv2.imread(image_path, cv2.IMREAD_GRAYSCALE)

if image is None:
    print("Error: Image could not be read.")
else:
    compute_and_visualize_hog(image)

```

Original Image



HOG Descriptors



In [34]:

```

import os
import cv2
import numpy as np
import matplotlib.pyplot as plt
from skimage import filters, exposure
from sklearn.decomposition import PCA
from sklearn.preprocessing import StandardScaler

def compute_edge_histogram(img):
    gray_img = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)
    angle_sobel = np.mod(np.arctan2(filters.sobel_v(gray_img), filters.sobel_h(gray_img)), np.pi)
    hist, _ = exposure.histogram(angle_sobel.flatten(), nbins=36)
    return hist

def process_images_in_folder(folder_path):
    histograms = []

    for filename in os.listdir(folder_path):
        image_path = os.path.join(folder_path, filename)

        # Check if the file has a valid image extension
        if image_path.lower().endswith('.jpg', '.jpeg', '.png'):

```

```

    img = cv2.imread(image_path)
    hist = compute_edge_histogram(img)
    histograms.append(hist)

    return histograms

def plot_2d_points(reduced_data, labels):
    unique_labels = np.unique(labels)

    for label in unique_labels:
        indices = labels == label
        plt.scatter(reduced_data[indices, 0], reduced_data[indices, 1], label=f'Class {label}')

    plt.title('2D Points after PCA and Standard Scaling')
    plt.xlabel('Principal Component 1 (Standardized)')
    plt.ylabel('Principal Component 2 (Standardized)')
    plt.legend()
    plt.show()

# Folder paths for images from two classes
class1_folder_path = '/content/drive/MyDrive/MyImages/n02092002-Scottish_deerhound/'
class2_folder_path = '/content/drive/MyDrive/MyImages/n02095314-wire-haired_fox_terrier/'

# Process images and compute edge histograms for each class
class1_histograms = process_images_in_folder(class1_folder_path)
class2_histograms = process_images_in_folder(class2_folder_path)

# Combine histograms from both classes
all_histograms = np.vstack([class1_histograms, class2_histograms])

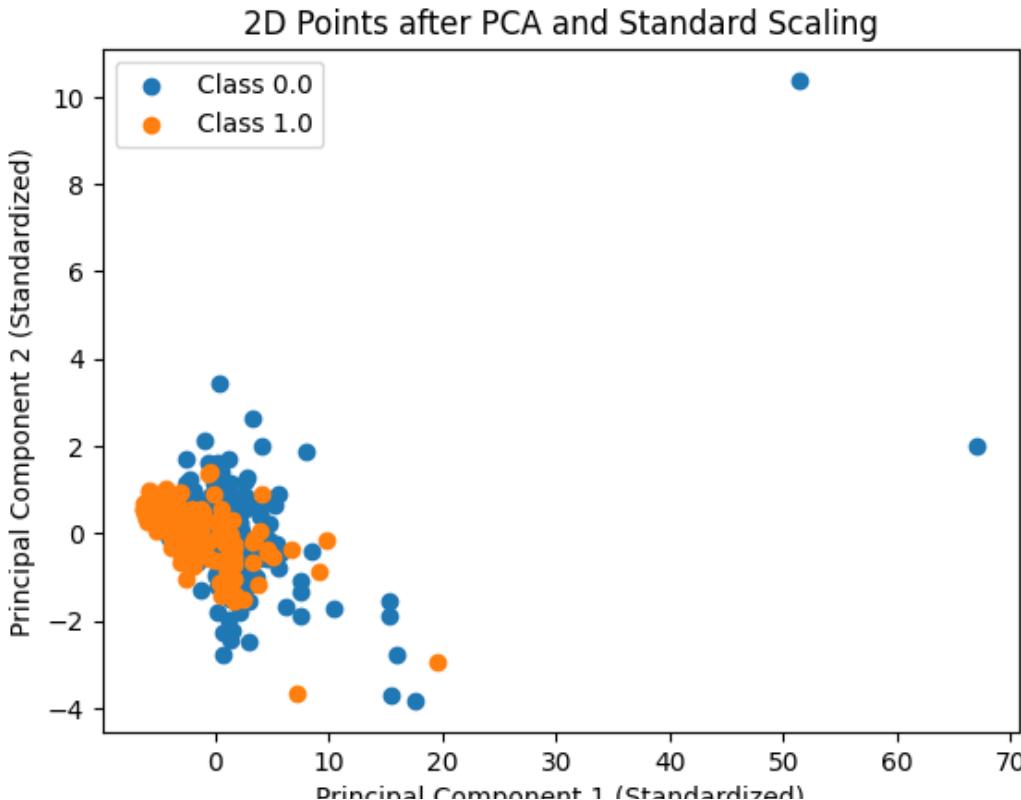
# Generate labels for each histogram (0 for class 1, 1 for class 2)
labels = np.zeros(len(class1_histograms) + len(class2_histograms))
labels[len(class1_histograms):] = 1

# Perform PCA for dimensionality reduction
pca = PCA(n_components=2)

# Use StandardScaler to normalize the data before applying PCA
scaler = StandardScaler()
normalized_data = scaler.fit_transform(all_histograms)
reduced_data = pca.fit_transform(normalized_data)

# Plot the 2D points with different colors for each class
plot_2d_points(reduced_data, labels)

```



In [40]:

```
#PCA
dogs_pca={0:'Scottish Deerhound',1:'Wire Haired Fox Terrier'}
```

In [48]:

```
# Correct the keys in dogs_pca to match the folder names exactly
dogs_pca = {0: 'n02092002-Scottish_deerhound', 1: 'n02095314-wire-haired_fox_terrier'}
```

In [67]:

```
def images_select_pca():
    images_hist = []
    for image_path in dog_images_cropped:
        folder_name = str(image_path).split('/')[-2] # Extract the folder name
        for value in dogs_pca.values():
            if value.lower().replace(" ", "_") in folder_name.lower():
                images_hist.append(image_path)
                break # Stop searching once a match is found
    return images_hist

images_pca = images_select_pca()
print(images_pca)
```

```
['/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_10911-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11088-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1029-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_109-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1130-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_10693-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11390-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1147-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11131-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11428-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1086-1.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1086-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11087-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_10699-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11459-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11105-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11245-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_11105-1.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_10060-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_13372-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_14369-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_15064-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_15064-1.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1253-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_12394-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_12977-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_14825-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_13159-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1200-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_14540-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1242-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_120-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_12595-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_12544-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1339-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_12828-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_12414-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_15096-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_14102-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_1439-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_14771-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_14567-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_149-0.jpg',
 '/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_13380-0.jpg']
```



```
002-Scottish_deerhound/n02092002_7751.jpg']
```

In [68]:

```
images_pca[0]
```

Out[68]:

```
'/content/drive/MyDrive/ResizedImages/n02092002-Scottish_deerhound/n02092002_10911-0.jpg'
```

In [69]:

```
def pca():
    histo= []
    for i in images_pca:
        img = cv2.imread(i, cv2.IMREAD_GRAYSCALE)
        hist = cv2.calcHist([img], [0], None, [256], [0, 256]).flatten()
        histo.append(hist)
        scaler = StandardScaler()
        histog = scaler.fit_transform(histo)
    pca = PCA(n_components=2)
    histgr = pca.fit_transform(histog)
    return histgr
```

```
pca_hist=pca()
```

```
pca_hist
```

Out[69]:

```
array([[ 5.18675636e+00,  3.83370304e+00],
       [ 6.59521442e+00, -8.35608367e-01],
       [ 5.63333695e-01,  3.69093159e+00],
       [-1.72229586e+01, -2.50829914e+00],
       [ 6.38345549e+00,  4.17745761e+00],
       [ 1.58871296e+00,  3.01624419e+00],
       [-2.97342694e+00,  6.21145154e+00],
       [-4.03900734e+00, -5.41897736e+00],
       [ 7.25189177e+00, -3.83196027e+00],
       [ 2.88959143e+00,  6.12349848e+00],
       [-1.72904951e+01,  3.03547750e+00],
       [-1.67428374e+01, -8.20549096e+00],
       [-8.56641650e+00, -2.78305694e+00],
       [ 4.73458027e-01, -2.13987537e+00],
       [-2.47991972e+00, -4.66370997e+00],
       [ 8.91020088e-01,  1.63358256e+00],
       [ 6.79270488e+00,  1.06082153e+01],
       [ 3.20142360e+00, -3.20211843e+00],
       [-6.55381520e+00, -1.19217763e+00],
       [ 5.17426783e+00, -9.02085747e-01],
       [-1.47465952e+00,  1.36779906e+01],
       [ 1.11937479e+01,  3.69849050e-02],
       [ 1.20912971e+00,  5.71294211e+00],
       [ 4.85068173e+00,  1.82350897e-01],
       [-1.98252799e+00, -8.15341890e+00],
       [ 5.46281662e+00,  3.57250333e+00],
       [ 4.80281794e+00,  5.15949509e+00],
       [-7.56192626e+00,  1.48719190e+01],
       [ 1.82842554e+00,  4.33243124e+00],
       [-6.35826249e-01,  1.59330375e+01],
       [ 2.07341267e+00,  4.93772883e+00],
       [ 1.72149078e+01,  1.17740134e+01],
       [ 3.04248469e+00,  5.24154286e+00],
       [ 1.22077392e+01, -1.05256708e+01],
       [ 4.55322294e+00, -3.42409053e+00],
       [-1.81719188e+00,  6.37244296e+00],
       [ 3.69984914e+00,  3.52376639e+00],
       [ 3.12284768e+00,  1.40395458e+01],
       [ 9.97019431e+00, -7.29464170e+00],
       [-1.40873652e+01,  2.88742447e+00],
       [-1.43531415e+00, -3.97451161e+00],
       [ 1.00000000e+00,  0.00000000e+00]]]
```

[-1.9935 / 435e+00, 2.9195294 / e+00],
[1.82326680e+00, 4.60164376e+00],
[1.07036923e+01, -1.02395100e+00],
[-1.07237310e+00, 5.32423452e+00],
[5.33160208e+00, 1.48181056e+00],
[8.84780629e+00, 4.41656515e+00],
[1.09210152e+01, 8.84142703e+00],
[3.69710810e-01, -9.81936893e+00],
[7.54598634e+00, 2.49440387e+00],
[2.06128073e+00, -7.33410380e+00],
[-6.65881815e+00, -1.82730440e-01],
[7.08742340e+00, -1.39260678e+00],
[-1.82576553e+01, 4.33072373e+00],
[4.58478624e+00, -8.04044880e+00],
[6.07345646e+00, 1.60124279e+01],
[-2.58813919e+00, -4.25132666e+00],
[-6.74326475e-01, 1.73046131e+01],
[-7.05992903e+00, 1.02871417e+01],
[-1.98285475e+01, 7.39126694e+00],
[-1.12002533e+01, -7.49467259e+00],
[-4.31848742e+00, -9.69004690e+00],
[7.34778257e+00, -1.25453257e+01],
[-5.74568505e+00, -8.03440528e+00],
[1.77532114e+00, -1.27031978e+01],
[-1.54327858e+00, 1.32179060e+01],
[3.02987167e+00, -8.27637896e+00],
[-9.07839555e-01, -7.46830277e+00],
[-3.78608866e+00, 3.13735683e+00],
[-6.35183175e+00, 1.57404762e+00],
[1.89306250e+01, 4.47365884e+00],
[-7.90024434e+00, -3.02340331e-01],
[-7.07960391e-01, 7.96882827e+00],
[-5.22550942e+00, 4.83667630e+00],
[-8.04412787e+00, -1.78145178e+00],
[-4.78790785e+00, -8.70481231e+00],
[-1.12381395e+01, -1.04118208e+00],
[-3.87076843e+00, 7.16275479e+00],
[-8.47774627e-02, -4.01648862e+00],
[3.35657566e+00, -4.50596740e+00],
[-1.87872768e+01, -4.90514750e-01],
[2.43779906e+00, -5.05447648e+00],
[1.48984189e+01, 3.16013289e+00],
[1.32741266e+01, 8.36050998e-01],
[-4.13517013e+00, -2.83825729e+00],
[1.36170689e+01, 1.77543359e+00],
[1.45537594e+00, -8.19681821e+00],
[4.31747458e+00, 4.38264092e-01],
[8.47718801e+00, -4.68315240e+00],
[5.82909740e+00, -1.19904510e+01],
[5.94176692e+00, -5.68492364e+00],
[-1.14934315e+01, 7.54619415e+00],
[4.51369102e+00, 5.16151377e+00],
[-1.82346053e+00, -4.97427991e+00],
[-2.94627125e+00, -4.26559839e+00],
[4.10888198e+00, -2.14017515e+00],
[3.20783231e+00, 4.22628345e+00],
[-2.10819732e+00, 4.61615239e+00],
[-5.36280243e-02, -3.25921866e+00],
[-1.53479488e+00, -1.02634441e+01],
[3.68229516e+00, 3.98407146e-01],
[-1.77786825e+00, -7.18387270e-01],
[5.36598288e-01, -1.25403394e+01],
[3.74328371e+00, -1.23841714e+00],
[1.53143097e+00, 1.35977727e+01],
[5.54891448e+00, 5.79976384e+00],
[5.59745667e+00, 2.49274498e+00],
[5.65915393e+00, -1.05366367e+01],
[1.32038679e+01, -7.74548591e+00],
[4.78829394e+00, -1.28387431e+01],
[-1.15797816e+01, 5.78859347e+00],
[2.17292677e+00, -1.87716166e+01],
[2.18472842e+01, 6.35314447e+00],
[1.07000000e+01, 2.05000000e+01]

[-1.27869602e+01, -2.25381423e+00],
[-2.84600504e+00, -1.33060059e+01],
[6.22025229e+00, 9.84901657e+00],
[6.25738296e+00, -8.77001085e+00],
[6.41912838e+00, -5.58376005e+00],
[3.76651112e+00, -1.42807127e+00],
[-1.72918423e+01, -3.37566795e+00],
[5.33317467e+00, -4.42351050e+00],
[1.37934117e+01, 1.79613652e+01],
[-4.94366746e+00, -8.77687736e+00],
[-4.03830987e+00, -6.23583763e-01],
[3.04734882e+00, 4.36339211e+00],
[8.30938382e+00, 1.09381509e+01],
[4.10628400e+00, 5.75337008e+00],
[-1.73717089e+01, 6.22380842e+00],
[-1.38371381e+01, 7.10413463e+00],
[-2.54693709e+00, -4.62104858e+00],
[-9.41755775e+00, -6.59709132e+00],
[-8.24990654e+00, -5.47911839e-01],
[-1.26149722e+01, 1.29804420e+00],
[8.63025258e+00, -4.63464898e+00],
[-1.02345909e+01, 1.88965200e+00],
[-3.79644440e+00, 1.04309543e+01],
[4.72955290e+00, -4.86296353e+00],
[7.09954977e-01, 1.27539259e+00],
[1.59256560e+00, -5.50992994e+00],
[-5.42214901e+00, -1.36751316e+01],
[-1.29485426e+01, -4.43302846e+00],
[-7.80830018e+00, 8.36087810e+00],
[9.31651783e+00, -1.21843057e+01],
[8.59922863e+00, 7.01198108e+00],
[-2.08323702e+01, 6.51444183e+00],
[-4.04663446e-01, -1.38975104e-01],
[3.16838180e+00, -4.84521374e+00],
[-1.18952798e+01, 2.09939786e+00],
[1.39311909e+00, 4.39634012e+00],
[-5.19647268e+00, -1.13926759e+01],
[-5.54429946e-01, -2.34549300e+00],
[5.48568018e+00, 1.23637350e+01],
[-4.64669087e+00, -2.88631084e+00],
[6.19280903e+00, 7.88783379e-01],
[-3.99104211e+00, -1.03146592e+01],
[-1.12096557e+00, -1.40427016e+01],
[1.44431606e+00, -4.80007945e+00],
[-1.00953112e+01, 1.15853304e+00],
[6.51615426e+00, 1.52778115e+01],
[1.14648794e+00, 6.04616986e+00],
[-3.32771017e+00, -4.58394891e+00],
[1.44588281e+00, -4.84073244e+00],
[1.06222654e+01, 1.65940096e+01],
[1.02749100e+01, 8.88759479e+00],
[2.72211184e+00, -7.05888346e+00],
[-5.15871379e+00, 1.16733623e+01],
[2.93159624e+00, -3.72864675e+00],
[-1.71263794e+00, -7.30738961e+00],
[-7.49463545e+00, -8.00010816e+00],
[1.39232173e+00, 1.42925352e+01],
[1.03552341e+01, -6.54308747e+00],
[6.06252431e+00, 1.64016329e+00],
[5.83829295e+00, -9.01861054e+00],
[-8.45867613e+00, 9.62525005e+00],
[5.14349701e+00, -1.36197178e+01],
[3.13093593e+00, -8.44593352e-01],
[8.97495037e+00, -5.26194223e+00],
[-5.97022886e+00, 1.19211776e+00],
[-1.76265585e+00, -4.60662736e+00],
[-1.15364750e+01, 7.94924776e-01],
[-8.53476296e+00, 9.63715827e-01],
[-8.55097199e+00, 6.57331409e+00],
[3.40343912e+00, 8.40865082e+00],
[-2.37688421e+00, 1.00149702e+01],
[2.09932719e+00, 4.16619917e+00],
[6.22201200e+00, 2.12510700e+00]

l 6.33901368e+00, -3.13540129e+00],
[-3.27180903e+00, -2.09192752e+00],
[-7.70888362e+00, 1.00862515e+00],
[1.63222934e+01, 7.73906753e+00],
[-2.30449164e+00, -3.30258324e+00],
[-9.10704578e+00, -7.81136018e+00],
[1.43752612e+00, -6.76486066e+00],
[-1.49297659e+01, -1.05758590e+01],
[-5.78903603e+00, -1.49213667e+01],
[-1.44269863e+01, 4.63525117e+00],
[2.40017883e+00, -8.19244670e+00],
[1.72422658e+01, -1.15565462e+01],
[-5.70869767e+00, -1.29970606e+00],
[7.34684718e+00, -8.66518741e+00],
[-6.05505675e+00, -2.16444988e+00],
[-2.98546290e+00, -9.73897968e+00],
[-3.73903624e+00, 1.02859256e+01],
[-1.11767353e+01, 8.56026857e+00],
[6.40238735e+00, 7.56441161e+00],
[6.20853655e+00, 1.94615093e+01],
[1.78990654e+00, 1.54461579e+00],
[-1.41482111e+00, -2.32760698e+00],
[-1.52338511e+00, -1.57830292e+01],
[-7.64980887e-01, 6.32829365e+00],
[1.83601227e+00, -3.58589608e+00],
[-1.12796755e+01, 6.12508784e+00],
[4.04039911e+00, 5.61058452e+00],
[9.07579293e-01, -2.92160635e-01],
[-5.72547643e+00, -5.32007273e-01],
[9.60782495e+00, -1.12649505e+00],
[5.24368131e+00, 1.13883361e+01],
[1.01689383e+01, 3.54014460e+00],
[4.46616751e+00, -5.92031783e+00],
[-2.15692265e+01, -1.10763624e+00],
[-2.11409109e+00, -2.14460336e+00],
[4.27657082e+00, 4.36425093e+00],
[-1.26796090e+01, 9.34617511e-01],
[7.12954682e+00, -1.31927384e+01],
[8.13473592e-01, -1.21957239e+01],
[-6.27435467e+00, -4.94553228e+00],
[4.89085305e+00, -1.35974850e+01],
[-1.83881701e-01, -7.37078176e+00],
[-7.31218273e-01, -9.30652869e+00],
[-3.78078358e+00, 2.40871692e+00],
[6.56742738e-03, -2.74094338e+00],
[4.95584134e-01, 3.60482476e+00],
[4.19629087e+00, -1.05415331e+01],
[1.70103190e+00, -1.91081973e+00],
[5.68918884e-01, -3.15708008e+00],
[1.88511399e+00, -8.07848141e+00],
[-5.88466483e+00, -8.26297494e+00],
[6.93262747e+00, -4.73895031e+00],
[-4.12816595e-01, 1.39161578e+01],
[4.51100344e+00, -8.40177946e+00],
[-7.21172676e+00, -5.49896459e+00],
[-2.06302883e+00, 1.31391765e+01],
[-5.54648519e+00, 1.81842307e+01],
[8.20698133e+00, -7.88808441e-01],
[-1.32184925e+01, 5.17240984e+00],
[6.55683886e+00, 9.67119569e+00],
[8.34093756e+00, -3.08711029e+00],
[5.77184089e+00, 4.02171737e+00],
[6.51255759e+00, -5.46825904e-01],
[6.15893913e+00, 3.98668317e+00],
[-1.72234124e+01, -2.26825926e+00],
[1.74779874e+00, 3.67537149e+00],
[2.66020586e-01, 3.10319573e+00],
[-2.29514768e+00, 6.31504321e+00],
[-2.69468948e+00, -2.18634193e+00],
[6.95590345e+00, -3.05708900e+00],
[3.33039080e+00, 7.36729121e+00],
[-1.73912125e+01, 3.04936633e+00],
[2.10100741e-02, 2.01114055e-00]

[-8.12199141e+00, -2.21114355e+00],
[-1.92747576e+00, -3.38434041e+00],
[7.72926400e-01, -1.81571702e+00],
[3.49110049e+00, -2.61833518e+00],
[6.89520346e+00, 1.11752864e+01],
[-5.81359907e+00, -3.77482663e-01],
[5.76767209e+00, 1.70297360e+00],
[-1.37635169e+00, 1.41628543e+01],
[1.36239777e+00, 6.00340053e+00],
[4.37069831e+00, 1.51538956e+00],
[-2.01680252e+00, -6.68003764e+00],
[5.61546056e+00, 4.18918235e+00],
[5.19337633e+00, 5.98170124e+00],
[-7.14966581e+00, 1.49980613e+01],
[1.77361411e+00, 4.43363746e+00],
[8.09683272e-03, 1.64965076e+01],
[1.91618606e+00, 5.01721429e+00],
[1.73518441e+01, 1.16876007e+01],
[3.19326795e+00, 5.48399610e+00],
[1.21147757e+01, -1.04144856e+01],
[4.83890782e+00, -3.09548014e+00],
[-1.82305138e+00, 6.65360686e+00],
[3.19997231e+00, 1.41982504e+01],
[3.69245017e+00, 3.92238330e+00],
[1.05195112e+01, -5.57986177e+00],
[-1.41218223e+01, 2.97453441e+00],
[-8.45520936e-01, -2.20748165e+00],
[1.89523143e-01, 5.57768263e+00],
[2.56404794e+00, 4.76452914e+00],
[1.06319318e+01, -6.92840809e-01],
[-1.26721239e+00, 5.22535453e+00],
[5.28948557e+00, 1.92529266e+00],
[8.88370139e+00, 4.44187559e+00],
[1.07969514e+01, 9.38753463e+00],
[1.67365771e-01, -8.46210938e+00],
[7.63646542e+00, 2.21446688e+00],
[1.91419419e+00, -7.78514499e+00],
[-6.52783854e+00, 7.87999072e-02],
[7.09792077e+00, -1.90774879e-01],
[-1.81083938e+01, 4.31213034e+00],
[6.28645821e+00, 1.63834198e+01],
[4.47942381e+00, -7.92125562e+00],
[-2.55315647e+00, -3.70616286e+00],
[-7.13002919e+00, 1.03264118e+01],
[-1.94727186e+01, 7.63317228e+00],
[-1.17613516e+01, -7.61384389e+00],
[-4.39404385e+00, -9.70149747e+00],
[-5.98496767e+00, -8.25032406e+00],
[7.34650505e+00, -1.30472637e+01],
[1.71988914e+00, -1.22193961e+01],
[2.87846949e+00, -8.27341410e+00],
[-1.54944417e+00, 1.29534543e+01],
[-9.25955722e-01, -6.91837001e+00],
[-3.56428443e+00, 3.71477602e+00],
[-6.32988192e+00, 1.82511240e+00],
[1.87537994e+01, 4.67665751e+00],
[-7.85283674e+00, -2.70495696e-01],
[-9.12119806e-01, 8.50790366e+00],
[-5.02163185e+00, 5.26842497e+00],
[-7.97983799e+00, -1.42781833e+00],
[-4.69053646e+00, -6.78610446e+00],
[-1.08261416e+01, -1.10149870e-02],
[-3.69180792e+00, 7.79604101e+00],
[-5.93400552e-02, -3.34806009e+00],
[3.46189164e+00, -3.69729288e+00],
[-1.84663299e+01, -1.50957422e-01],
[1.49309743e+01, 3.58914398e+00],
[1.34123855e+01, 1.17799616e+00],
[-4.26696429e+00, -2.85019444e+00],
[1.33123748e+01, 2.37731551e+00],
[1.49807251e+00, -6.92974885e+00],
[3.71291525e+00, 1.39732338e+00],
[2.62101677e+00, 1.66710001e+00]

[8.631016e+00, -4.06127991e+00],
[5.81597245e+00, -1.27566783e+01],
[5.64795774e+00, -4.51000588e+00],
[-1.11746197e+01, 7.87780282e+00],
[4.42910510e+00, 5.44976730e+00],
[-1.60995852e+00, -3.57879951e+00],
[-2.85373639e+00, -3.56406515e+00],
[4.04478746e+00, -1.99790754e+00],
[3.28294923e+00, 4.38098300e+00],
[-2.16367811e+00, 4.67497355e+00],
[4.84179663e-01, -2.33950975e+00],
[-1.54929288e+00, -1.01691719e+01],
[-1.80958827e+00, -6.18036621e-01],
[3.67844266e+00, 5.06178375e-01],
[7.18434026e-01, -1.24672906e+01],
[3.64307459e+00, -1.27910222e+00],
[1.51878274e+00, 1.36081134e+01],
[5.33337559e+00, 6.51737317e+00],
[5.43990261e+00, 3.12590295e+00],
[5.53542456e+00, -1.00110776e+01],
[1.31239027e+01, -7.67683331e+00],
[4.67768108e+00, -1.15659662e+01],
[-1.05887116e+01, 5.77023043e+00],
[1.68361016e+00, -1.71310071e+01],
[2.12993955e+01, 6.59260756e+00],
[-1.20967411e+01, 2.78701166e+00],
[-2.76640820e+00, -1.25953653e+01],
[6.71660838e+00, 1.08094892e+01],
[6.21570408e+00, -7.76897902e+00],
[6.26737027e+00, -5.24151269e+00],
[3.76870242e+00, -9.70218527e-01],
[-1.71170617e+01, -3.27683395e+00],
[5.41301719e+00, -3.52615087e+00],
[1.38613303e+01, 1.80029183e+01],
[-4.87688213e+00, -6.81323550e+00],
[-4.16738785e+00, -4.81898658e-01],
[3.05387151e+00, 4.43968787e+00],
[4.17042502e+00, 5.86594471e+00],
[-1.34441967e+01, 7.19048507e+00],
[-2.41608673e+00, -4.20879679e+00],
[-9.03568611e+00, -6.04657117e+00],
[-7.70889798e+00, -1.72871317e-01],
[-1.26511650e+01, 1.32582516e+00],
[8.70656154e+00, -5.36896404e+00],
[-9.92837844e+00, 2.17621168e+00],
[-4.19021320e-01, -6.87440806e-01],
[1.63661859e+00, -5.08157484e+00],
[-5.45352590e+00, -1.34981426e+01],
[-1.26287802e+01, -4.32773614e+00],
[-7.89674575e+00, 8.42736632e+00],
[8.68675689e+00, -9.84054093e+00],
[8.62661792e+00, 7.39584486e+00],
[-2.08751468e+01, 6.57217992e+00],
[-5.96455578e-01, -3.77831000e-01],
[-1.16689707e+01, 2.45116765e+00],
[1.19105174e+00, 4.57415114e+00],
[-5.13131826e+00, -1.09104862e+01],
[-1.28912951e-01, -1.51343560e+00],
[6.03875325e+00, 1.24190153e+01],
[-4.56446541e+00, -2.77114920e+00],
[6.15367923e+00, 7.22738913e-01],
[-1.23337278e+00, -1.42603682e+01],
[-9.87957305e+00, 1.28301207e+00],
[1.44285278e+00, -4.20681307e+00],
[6.40510070e+00, 1.51160958e+01],
[-3.44342189e+00, -4.83225600e+00],
[1.59049168e+00, -4.15161762e+00],
[1.07822691e+01, 1.67432497e+01],
[1.03586534e+01, 9.44681266e+00],
[2.73354934e+00, -6.30463677e+00],
[-4.95492003e+00, 1.21057432e+01],
[2.89400791e+00, -3.04608433e+00],
[1.70076006e+00, 7.22010500e+00]

[-1.12016296e+00, -1.38949593e+00],
[-8.19954725e+00, -8.80876369e+00],
[1.50109197e+00, 1.47450896e+01],
[1.01740120e+01, -6.96723983e+00],
[5.95207968e+00, 1.44150579e+00],
[5.81109723e+00, -8.56373453e+00],
[-8.28748583e+00, 9.74166139e+00],
[4.76303652e+00, -1.31013208e+01],
[2.96596268e+00, -7.35436337e-01],
[8.93169910e+00, -4.87706035e+00],
[-5.90951465e+00, 1.36472477e+00],
[-1.75160270e+00, -4.14781229e+00],
[-1.13671425e+01, 9.37093847e-01],
[-8.39579085e+00, 1.06550630e+00],
[-8.56986159e+00, 6.50971935e+00],
[-2.59531525e+00, 1.04381265e+01],
[2.15724228e+00, 4.36275112e+00],
[5.57612480e+00, 3.10142064e-01],
[-3.09722218e+00, -1.98489668e+00],
[-7.62299824e+00, 1.16204532e+00],
[1.61440615e+01, 7.78813285e+00],
[-2.09070024e+00, -3.08008544e+00],
[-9.13789091e+00, -7.61916527e+00],
[1.39341890e+00, -6.80524755e+00],
[-5.89243635e+00, -1.48221969e+01],
[-1.37587746e+01, 4.97808297e+00],
[2.32401523e+00, -6.81373996e+00],
[1.72268471e+01, -1.17020305e+01],
[-6.04612561e+00, -1.76987627e+00],
[7.28545037e+00, -8.41430332e+00],
[-5.81854035e+00, -1.81318409e+00],
[-3.13586287e+00, -9.69057421e+00],
[-3.78348411e+00, 1.03601025e+01],
[-1.11804206e+01, 8.66608307e+00],
[6.89850980e+00, 7.11152183e+00],
[1.91482351e+00, 1.75676227e+00],
[6.42804126e+00, 1.95654696e+01],
[-1.10477863e+00, -1.70543244e+00],
[-1.52206295e+00, -1.53173514e+01],
[-4.71723655e-01, 7.27284895e+00],
[1.61950217e+00, -2.71567827e+00],
[-1.04867829e+01, 6.46971644e+00],
[4.52648029e+00, 7.26660510e+00],
[-5.02589300e+00, -9.24312297e-02],
[8.45536430e-01, -3.14632128e-01],
[9.66546632e+00, -2.40005428e+00],
[5.35119529e+00, 1.12979351e+01],
[1.01857116e+01, 3.50323758e+00],
[3.97236954e+00, -5.25775659e+00],
[-2.14408955e+01, -8.30300820e-01],
[-2.12377759e+00, -1.93456022e+00],
[4.29386870e+00, 4.51109983e+00],
[-1.25530150e+01, 1.26249826e+00],
[7.15290711e+00, -1.26926520e+01],
[9.66966179e-01, -1.10463535e+01],
[-6.39646851e+00, -4.92869684e+00],
[4.90910414e+00, -1.22284728e+01],
[-6.30909143e-01, -8.75405939e+00],
[-4.71004179e-02, -6.84827136e+00],
[-3.81554924e+00, 2.65718282e+00],
[1.83463686e-01, -2.12825485e+00],
[5.49473593e-01, 5.55518970e+00],
[4.04691136e+00, -9.86134340e+00],
[1.71106799e+00, -1.80598130e+00],
[6.13018711e-01, -3.05054115e+00],
[2.11614083e+00, -7.47367765e+00],
[-5.72230990e+00, -7.49503098e+00],
[6.92406153e+00, -4.08622295e+00],
[-4.47711455e-01, 1.41061257e+01],
[4.42902423e+00, -7.81576750e+00],
[-1.73011627e+00, 1.34404299e+01],
[-6.97423820e+00, -5.24132176e+00],
[5.50511000e-01, 1.00011111e-01]

```
[ -5.53544262e+00,  1.83041114e+01],  
[ 8.32087558e+00, -1.45044946e-01],  
[-1.35798009e+01,  5.13419979e+00],  
[ 6.47281599e+00,  1.01971967e+01],  
[ 8.20615757e+00, -2.96627143e+00]])
```

In [70]:

```
plt.scatter(pca_hist[:190,0],pca_hist[:190,1],color='blue')  
plt.scatter(pca_hist[190:,0],pca_hist[190:,1],color='red')  
plt.show()
```

